IMPERIAL GAZETTEER OF INDIA

MYSORE AND COORG

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PREFACE

ɪᴇ articles contained in this volume were drafted by
3. L. Rice, C.I.E., late Director of the Archaeological
ey of Mysore, who received notes on various technical
cts from the departments concerned.

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PROVINCIAL GAZETTEERS OF INDIA

MYSORE STATE

Mysore State.—A large Native State in Southern India, lying between 11° 36′ and 15° 2′ N. and 74° 38′ and 78° 36′ E. It consists of an undulating table-land, much broken up by chains of rocky hills and scored by deep ravines. Its form is that of a triangle, with the apex to the south, at the point where the Western and Eastern Ghāt ranges converge in the group of the Nīlgiris. The general elevation rises from about 2,000 feet above sea-level along the north and south frontiers to about 3,000 feet at the central water-parting which separates the basin of the Kistna to the north from that of the Cauvery to the south. This watershed divides the country into two nearly equal parts, a little north of lat. 13° and as far as long. 77°, where a transverse line marks the eastern watershed. Several chains of hills, running chiefly north and south, subdivide the whole into numerous valleys, widely differing in shape and size. Isolated peaks of massive rock, called droogs (from Sanskrit *durga*, 'hill-fort'), rear their heads on all sides to an elevation of 4,000 or 5,000 feet above the level of the sea. The area of the State is 29,433 square miles. The greatest length north and south is about 230 miles; east and west about 290 miles. It is bounded by Madras Districts on all sides except on the north-west, where it is bordered by two Bombay Districts, and towards the south-west, where Coorg intervenes.

Physical aspects. Situation, area, and boundaries.

The name is that of the capital, Maisūr, for Mahishūr (from *mahisha*, Sanskrit for 'buffalo,' reduced in Kanarese to *maisa*, and *ūru*, Kanarese for 'town' or 'country'), which commemorates the destruction of Mahishāsura, a minotaur or buffalo-headed monster, by Chāmundi or Mahishāsura Mardani, the form under which the consort of Siva is worshipped as the tutelary goddess of the ruling family. It is the *Mahisa-mandala* of Asoka's time, and forms the main part of the region called throughout Hindu literature Karnāta or Karnā-

Origin of name.

taka, a term now wrongly applied to the districts below the Eastern Ghāts (see CARNATIC).

Natural divisions and scenery.

Mysore is naturally divided into two regions of distinct character: the hill country, called the Malnād, on the west, confined to the tracts bordering or resting on the Western Ghāts (in Shimoga, Kadūr, and Hassan Districts); and the more open country in the east, known as the Maidān or Bayalshīme, comprising the greater part of the State, where the wide-spreading valleys and plains are occupied by numerous villages and populous towns. The Malnād is a picturesque land of mountain and forest, presenting the most diversified and beautiful scenery. The various parts of the Maidān take their character from the means of water-supply and the prevailing cultivation. The level plains of black soil, in the north, grow cotton or millets; the tracts in the south and west, irrigated by channels drawn from rivers, are covered with plantations of sugar-cane and fields of rice; those irrigated from tanks have gardens of coco-nut and areca palms; the nigh-lying tracts of red soil, in the east, yield *rāgi* and other 'dry' crops; the stony and wide-spreading pasture grounds, in the central parts of the country, are stretches of coarse grass, relieved by shady groves of trees.

Hill system.

From the massive group of the NĪLGIRIS, which command the southern frontier, stretch forth, north-west and north-east respectively, the WESTERN and EASTERN GHĀT ranges, between which the plateau of Mysore lies like a wedge. The hills within this table-land, though rarely in continuous connected chains, arrange themselves into systems crossing the country longitudinally, in directions more or less parallel to the Ghāt ranges, according to their proximity to one or the other. They attain their greatest elevation somewhat north of lat. 13°, where Mulainagiri (the highest point in Mysore), in the Bābā Budans, in the west, rises to 6,317 feet, and Nandidroog, in the east, to 4,851 feet. The best defined of the interior ranges is a belt, from 10 to 20 miles wide, running between 77° and 77° 30′ E., from the BILIGIRI-RANGANS (4,195 feet), through Sāvandurga (4,024) and Sivaganga (4,559), north up to Maddagiri (3,935), and on by Nidugal (3,772) to Molakālmuru and the frontier. In the west a corresponding range, not more than 10 miles in width, runs north along meridian 75° 30′ E., from Ballālrāyandurga (4,940 feet) beyond Shikārpur, having on its east the big loop of the BĀBĀ BUDANS, whose peaks rise to over 6,000 feet. Intermediate between these two internal ranges is a chain, with considerable intervals between its component parts, trending t

the east on the south of the central watershed, and to the west on the north of it. Starting from the Wynaad frontier at Gopālswāmi Betta (4,770 feet), it passes by Nāgamangala to Chunchangiri (3,221), reappears to the west of Kibbanhalli in the Hāgalvādi hills (3,543), and crosses in a continuous belt through the middle of Chitaldroog District. Of minor ranges the most important is that of NANDIDROOG, commencing near the hill of that name, with several peaks of nearly equal height, and passing north by Gudibanda to the Anantapur country. In the west a similar medial chain, but of lower elevation, runs from east of the Bābā Budans through Sakunagiri (4,653 feet), by the Ubrāni hills and Basavāpatna, along the right bank of the Tungabhadra to the frontier, where it meets that river.

River system.

The drainage of the country, with a slight exception, finds its way east to the Bay of Bengal, and is divisible into three great river systems: that of the KISTNA on the north, the CAUVERY on the south, and the PENNER, PONNAIYĀR, and PĀLĀR on the east. The only streams flowing west to the Arabian Sea are those in the north-west, which, uniting in the Sharāvati, hurl themselves down the Ghāts in the magnificent GERSOPPA FALLS; and some minor streams which run down to South Kanara. A line drawn east from Ballālrāyandurga to Nandidroog, and thence south to Anekal, with one from Devarāyadurga north to Pāvugada, will indicate approximately the watershed separating the three main river basins. From the north of this ridge flow the Tunga and Bhadra, rising in the Western Ghāts and uniting in the TUNGABHADRA, which, after receiving the HAGARI or Vedāvati, joins the Kistna, beyond the limits of Mysore near Kurnool. From the south, the HEMĀVATI (tributary the Yagachi), the Lokapāvani, Shimsha, and ARKĀVATI flow into the Cauvery, which rises in Coorg and takes a south-easterly course through the State, receiving also from the south the LAKSHMANTĪRTHA, the KABBANI or Kapila (tributaries the Nugu and Gundal), and the HONNUHOLE or Suvarnāvati. From the east of the watershed, in the immediate neighbourhood of Nandidroog, spring three main streams: namely, the Uttara Pinākini or PENNER (tributaries the Chitrāvati and Pāpaghni), which runs into the sea at Nellore; the Dakshina Pinākini or PONNAIYĀR, which reaches the sea at Cuddalore; and between them the PĀLĀR, whose mouth is at Sadras.

Owing to either rocky or shallow beds, none of these rivers is navigable in Mysore, but timber is floated down the Tunga, the Bhadra, and the Kabbani at certain seasons. Most of the

streams are fordable during the dry months, but during floods traffic over them is often suspended until the water subsides. Though useless for navigation, the main streams, especially the Cauvery and its tributaries, support an extensive system of irrigation by means of channels drawn from immense dams, called 'anicuts,' which retain the upper waters at a high level and permit only the overflow to pass down stream. The channels or *kālves* drawn from them meander over the country on either bank, following all the sinuosities of the ground, the total length maintained being upwards of 1,200 miles.

Tanks.

There are no natural lakes in Mysore; but the streams which gather from the hill-sides and fertilize the valleys are embanked at every favourable point in such a manner as to form series or chains of reservoirs called tanks (Kanarese, *kere*), the outflow from one at a higher level supplying the next lower, and so on all down the course of the stream at a few miles apart. These tanks, varying in size from small ponds to extensive lakes, are dispersed throughout the country to the number of nearly 30,000. The largest, Sūlekere, is 40 miles in circumference, but the Māri Kanave reservoir will exceed 90 miles. In the north-east are the spring-heads called *tal-pargi*, extending east of a line from Kortagere to Molakālmuru.

Geology[1]. Rock systems.

Granites and granitic gneisses, regarded as of Archaean age, occupy the greater portion of the State, and traversing these are metamorphic schists of Pre-Palaeozoic age. There are besides, (*a*) more recent acid, basic, and ultra-basic dikes, penetrating both the former systems, and irrupted probably not later than Lower Palaeozoic times; (*b*) a deposit of laterite, widely distributed in extensive sheets or oftener in small isolated patches, forming an almost horizontal capping on the denuded surfaces of the older rocks; (*c*) some relatively unimportant alluvial and sub-aerial deposits.

Schists. Three bands.

The schistose rocks which traverse the great complex of granite and granitic gneiss, and are more or less folded down into it, form three well-marked bands running in a generally north and south direction. Two are of large size, and are known respectively as the Shimoga and Chiknāyakanhalli bands, from their proximity to those towns. The third is the Kolār band, very small in extent, but of the greatest economic impor-

[1] The earliest account of the Geology of Mysore was by Captain Newbold in 1844–50 (see articles on the 'Geology of Southern India,' *J.R.A.S.*, vols. viii, ix, xii). A State Geological department was formed under Mr. Bruce Foote in 1894, and is now under Dr. W. F. Smeeth, on whose notes this section is based.

tance. The two first named are southward extensions of the great bands in Dhārwār and Bellary[1]. The third is apparently an extension of a band running south along the Kadiri valley in Cuddapah, but a break of several miles appears to separate the two near the boundary line between Cuddapah and Mysore.

Shimoga band.

The Shimoga band crosses the Tungabhadra near Harihar, extends to the southern boundary of Kadūr District, and spreads from near Kadūr on the east to the edge of the Western Ghāts on the west, where it forms much of the high Ghāt country culminating in the Kudremukh at an elevation of 6,215 feet. From this point the western boundary is probably continuous up to Anantapur (Shimoga District). West of Anantapur the country is covered by a great spread of laterite beneath which gneiss is exposed in deep nullahs.

Chiknāyakanhalli band.

The Chiknāyakanhalli band runs through the middle of the State in a north-north-west and south-south-east direction. At the northern boundary it is divided into two horns by the great granite *massif* of Chitaldroog. Thence it runs south-south-west as far as Turuvekere in Tumkūr District, with an average width of about 18 miles. Here it suddenly pinches, and the only continuous extension southward is a narrow band, with an average width of 2 to 3 miles, running from Baichihalli to the Karigatta hill, north of the Cauvery, opposite the east end of the island of Seringapatam. A little to the west of this narrow band are several small strings of schist near Myasandra, Nelligere, and Nāgamangala, some of which appear to be dikes[2]. An important schist belt lying throughout the east of this band has been discovered, the rocks of which resemble those of the Kolār band. The southern extension towards Sivasamudram is rock containing 50 per cent. of iron.

Kolār band.

The Kolār band lies on the eastern side of the State. It extends north and south for a distance of 40 miles, with a maximum width of 4 miles, while three narrow strings extend southwards into North Arcot and Salem. In general outline the main portion of the band may be regarded as consisting of a southern portion about 12 miles long by 4 miles wide, in which the present Kolār gold-field is situated; a northern portion about 12 miles long by 5 miles wide; and a narrow neck of schist about 10 miles long by 1 mile wide, connecting

[1] See Bruce Foote's 'Geological Features of the South Mahratta Country,' 'Geology of the Bellary District,' and other papers (*Memoirs, G.S.I.*, vols. xii, xxv; and *Records, G.S.I.*, vols. xv, xxi, xxii).

[2] See *Mysore Geological Department Records*, vol. iii, plate 1; vol. ii, p. 82; vol. iii, p. 113.

these two parts. The band is composed essentially of hornblendic rocks, usually schistose, and some well-marked layers of ferruginous quartz rocks.

Granites and gneisses.

Granite exists in large irruptive masses which have broken up and penetrated the older gneisses and schists. The gneisses so largely developed in Mysore are for the most part rocks of granitic composition, having a parallel-banded, wavy, or whorl-like structure, due to the arrangement of the lighter and darker constituents in more or less distinct bands or streaks. They appear to be of igneous origin, rather than metamorphosed sedimentary rocks as suggested by Mr. Bruce Foote, the banding being due partly to segregation of the more basic constituents, and partly to the contemporaneous or subsequent veining by pegmatite, aplite, and other forms of granitic material. The prevailing type is a biotite-gneiss.

Botany.

The Malnād or eastern face of the Western Ghāts is clothed with magnificent timber and contains the richest flora. The summits of the mountains are bare of trees but covered with grasses and herbs—*Anthisteria*, *Andropogon*, *Habenaria*, &c. The valleys descending from them are filled with woods called *sholas*, leaving grass-covered ridges between. Above 4,500 feet is the evergreen belt; lower down, to 3,000 feet, is a mixed belt, practically continuous; and finally the deciduous trees are at the foot and throughout the plains. At extreme heights occur trees of the Nīlgiri flora, but smaller. The South Indian tree-fern often ascends into the highest *sholas*, but rarer ferns abound in the mixed zone. It is here that coffee (*Coffea arabica*), pepper (*Piper nigrum*), and cardamoms (*Flettaria cardamomum*) are cultivated. *Calophyllum tomentosum*, *Hardwickia binata*, *Bombax malabaricum*, *Vateria indica*, *Mesua ferrea*, *Myristica laurifolia*, *M. magnifica*, *Lagerstroemia lanceolata*, *L. Flos Reginae*, *Michelia Champaca*, *Ficus* of many species, and *Tectona grandis* are some of the prominent trees in this belt, with the prickly bamboo (*Bambusa arundinacea*). The Maidān or open plateau contains numerous species not found in the upper hill region. *Bassia latifolia*, *Pterocarpus santalinus*, *Tamarindus indicus*, *Feronia elephantum*, *Mangifera indica*, *Artocarpus integrifolia*, *Acacia arabica*, *Pongamia glabra*, *Santalum album*, *Phoenix sylvestris*, and *Cocos nucifera* are some of those characteristic of this part. The hill ranges here and extensive areas in the plains are covered with small trees, shrubs, and twiners of various species, forming what is called scrub jungle. The main roads are lined with avenues of indigenous trees and the railroads with hedges of the aloe (*Agave*

americana). Most villages have a grove (called a 'tope') of common trees.

Elephants range through the southern forests and are also found in Shimoga District. A special Khedda department for their capture and training was formed in 1873, but was in abeyance from the famine of 1876 until 1889, when it was again in operation till 1898. Tigers, leopards, and bears are numerous. Bison are found in the western and southern forests. Various kinds of antelope and deer, wild hog, wolf, and wild dog are met with in different parts. Monkeys abound, and the southern *langūr* frequents the western woods. Otters and pangolins may also be mentioned. Among birds, peafowl are common in the west; pelicans are also found, with numerous game birds. Jays, parrots, kingfishers, orioles, and other birds of gay plumage are common. So are vultures, with many kinds of kites, hawks, and crows, as well as owls of various kinds. Of reptiles, the hamadryad is met with in remote and dense forests. Cobras, pythons, the *karait*, the rat snake or *dhāmin*, the green snake and others are general in all parts. Iguanas and chameleons may often be seen, while large lizards called 'bloodsuckers' are universal. Crocodiles abound in most of the western rivers, where makseer and other large fish are also to be found. Of insects, leeches are common in the forests in the wet season, and are very troublesome. The lac insect propagates on the *jālāri* tree. Bees of many kinds are common. A small fly, not bigger than a flea, called the eye-fly or mango-fly, is quite a pest, especially in the mango season, and spreads ophthalmia. Mosquitoes are universal, and white ants or termites insatiable in their ravages. There is a great variety of mantis, some of which simulate straws or leaves. Fauna.

The year in Mysore may be divided into three seasons, the rainy, the cold, and the hot. The first commences with the bursting of the south-west monsoon, generally early in June, and continues, with some interval in August and September, to the middle of November, closing with the heavy rains of what is popularly called the north-east monsoon. It is followed by the cold season, which is generally entirely free from rain, and lasts till the end of February. The hot season then sets in during March, and increases in intensity to the end of May, with occasional relief from thunderstorms. The temperature is most agreeable during the rainy months, the range of the thermometer at Bangalore at that season being between 64° and 84°. In the cold season the mercury falls there as low as 51° in the early morning, and sometimes rises to 80° during the day. Climate.

The minimum and maximum in the shade during the hottest months are about 66° and 91°, or in extreme seasons, 96°.

Rainfall. The annual rainfall ranges from over 360 inches on the crest of the Western Ghāts to as little as 19 inches in the north centre. But these are extremes that apply only to limited areas. The excessive rain of the Malnād rapidly diminishes eastwards, and from 20 to 37 inches may be accepted as the general annual average for the greater part of the State[1]. The zone of heavy rain, 60 inches and over, is confined to the Western Ghāt region from Sorab to Manjarābād. From 40 to 60 inches of rain fall between Sorab and Shikārpur, in the Bābā Budans region, and in Heggadadevankote. The zone of 25 to 40 inches extends over all the remainder of the State, except Chitaldroog District, the north of Tumkūr and Kolār Districts, and the extreme south-east of Mysore District, which have less than 25 inches. The distribution closely follows that of the forest belts, the heaviest rain coinciding with the evergreen belt, the next with the deciduous forest, and the least rainy tracts with the dry belt.

The cold-season rains, December to March, are insignificant, scanty, and not much needed for the standing crops. But they are useful in keeping up the pasture supply. The hot-season rains, in April and May, sometimes called mango showers, are of the accidental kind, and give heavy short storms from the east. They are very important for agriculture, as a copious fall replenishes the tanks, and enables the cultivators to prepare the land for the ensuing monsoon. The south-west monsoon from June to September is perhaps the most essential for the country, which requires the steady drizzling rains of this season to make the soil productive. The north-east monsoon in October and November is essentially important for filling the tanks, and providing a store of water that may last over the rainless months.

A Meteorological department was formed in 1893, with observatories at Bangalore, Mysore, Hassan, and Chitaldroog, and having under its direction 203 rain-gauge stations. The table on the next page shows the average temperature and rainfall recorded at Bangalore, Mysore, and Chitaldroog for a period of years prior to 1901.

History. The authentic history of Mysore, like that of India in general, begins after the invasion by Alexander the Great in 327 B.C.,

[1] The mean annual relative humidity of the Mysore State is set down by Mr. H. F. Blanford as 66, that of Malabar and Coorg being 79, and of the Carnatic 67. (*Climates and Weather of India.*)

Chandra Gupta.

and has been gathered from the inscriptions, several thousands in number, scattered all over the country[1]. On the retirement of Alexander, the north of India came under the dominion of Chandra Gupta, the first of the Maurya emperors, with his capital at Pātaliputra (Patna on the Ganges). According to Jain traditions, supported by inscriptions and monuments, Chandra Gupta ended his days at Sravana Belgola in Mysore. In accordance with the dictates of the Jain religion, he gave up his throne in order to close his life in religious exercises, and accompanied the great teacher Bhadrabāhu on the migration which he led to the south from Ujjain, at the beginning of a twelve years' famine which he had predicted. When they

Station.	Height of Observatory above sea-level in feet.	Average temperature (in degrees F.) in							
		January.		May.		July.		November.	
		Mean.	Diurnal range.	Mean.	Diurnal range.	Mean.	Diurnal range.	Mean.	Diurnal range.
Bangalore* .	3,021	68·8	23·3	80·4	22·2	74·2	16·3	70·8	17·3
Mysore† .	2,518	72·5	24·5	80·9	22·6	75·0	15·9	73·3	18·4
Chitaldroog‡ .	2,405	73·5	22·9	82·7	22·9	75·3	13·6	73·5	18·3

NOTE.—The diurnal range is the average distance between maximum and minimum temperatures of each day.

* The figures for January are for twenty-four years and the others for twenty-five.

† The figures for January are for eight years and the others for nine.

‡ The figures are for nine years.

Station.	Average rainfall (in inches) for twenty-five years ending with 1901 in												
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total of year.
Bangalore .	0·12	0·20	0·45	1·31	4·29	2·97	3·91	5·02	6·82	6·74	3·13	0·49	35·05
Mysore . .	0·07	0·20	0·66	2·60	5·57	2·57	2·36	3·12	4·85	7·81	2·33	0·47	32·61
Chitaldroog	0·17	0·04	0·27	1·47	3·22	2·77	2·70	2·77	4·05	4·26	2·78	0·33	24·83

Asoka.

reached Sravana Belgola, Bhadrabāhu felt his end approaching, and sent on the body of pilgrims under Visākha to the Punnāta country, the south-western portion of Mysore, he himself remaining behind, tended by a single disciple, who was no other than Chandra Gupta. There he died, and Chandra Gupta also, after surviving his teacher twelve years. Whatever truth there may be in this story, the discovery by Mr. Rice of edicts of Asoka in the north-east of the Mysore country has put it beyond doubt that that portion of the State formed part of the Maurya empire. Asoka also sent missionaries, among

[1] These have been published by Mr. L. Rice, C.I.E., the Mysore Director of Archaeology, in a series called *Epigraphia Carnatica*, numbering twelve volumes.

other places, to Mahisa-mandala (Mysore) and Vanavāsi (Banavāsi, north-west of the State). These were probably just beyond the limits of his empire.

Andhras or Sātavāhanas. The north of Mysore next came under the rule of the Andhra or Sātavāhana dynasty. From the latter name is derived the form Sālivāhana, applied to an era, dating from A.D. 78, which is in common use. Their period extends from the second century B.C. to the second century A.D., and their dominions stretched from east to west over the entire Deccan. Their chief capital was Dhanakataka (Dhāranikotta on the Kistna), but they had a western capital at Paithan on the Godāvari. The kings who ruled in Mysore bore the general name Sātakarni.

Kadambas. The Andhras were succeeded by the Kadambas in the north-west, and by the Pallavas in the north-east. The former were of indigenous origin, their birthplace being Sthānagundūr (Tālagunda in the Shikārpur *tāluk*). Banavāsi was their capital, and Shimoga District a part of their kingdom. Pallavas. The Pallavas had Kānchi (Conjeeveram) as their capital, and Tundāka or Tonda-mandala (the Madras country east of Mysore) as their territory, and displaced the Mahāvalis or Bānas, claiming descent from Bali or Mahā Bali, apparently connected with Mahābalipur (the SEVEN PAGODAS, on the Madras coast). Mahāvalis or Bānas. Nolambas. From the ninth century the Pallavas are also called Nonambas or Nolambas, and gave their name to Nonambavādi or Nolambavādi (Chitaldroog District), the inhabitants of which are represented by the existing Nonabas.

Gangas. Meanwhile two Ganga princes from the north, of the Ikshvāku and therefore Solar race, named Dadiga and Mādhava, aided by the Jain priest Simhanandi, whom they met at Perūr (still called Ganga-Perūr, in Cuddapah), established themselves towards the close of the second century throughout the remaining parts of the Mysore country, with Kuvalāla or Kolāla (Kolār) as their chief city, and Nandagiri (Nandidroog) as their stronghold, founding the Gangavādi kingdom, whose inhabitants survive in the existing Gangadikāras. The name of this dynasty, which ruled in Mysore till the opening of the eleventh century, connects them with the Gangas or Gangaridae, the people of the Ganges valley, who according to Greek and Roman writers were the chief subjects of Chandra Gupta. The Gangas also founded dynasties in Kalinga (Orissa and adjacent parts), and are mentioned by Pliny as Gangaridae Calingae. It was remorse for the slaughter and devastation that attended his conquest of Kalinga which led Asoka to devote himself to peace and religion, as stated in his thirteenth Rock Edict. The boun-

daries of Gangavādi are given as: north, Marandale (not identified); east, Tonda-nād; west, the ocean in the direction of Chera (Cochin and Travancore); south, Kongu (Salem and Coimbatore). All the kings had the cognomen Kongunivarma. The third king removed his capital to Talakād on the Cauvery. The seventh king, Durvinīta, made extensive conquests in the south and east, capturing some of the Pallava possessions. In the middle of the eighth century the Ganga dominion was in a high state of prosperity, and was designated the Srīrājya or 'fortunate kingdom.' The king Srīpurusha subdued the Pallavas and took from them the title Permmanadi, always applied to the subsequent Ganga kings. He fixed the royal residence at Mānyapura (Manne in Bangalore District).

Chālukyas.

To revert to the north-west of the country. In the fifth century the Chālukyas, claiming to come from Ajodhyā, appeared in the Deccan and overcame the Rāshtrakūtas, but were stopped by the Pallavas. In the sixth century the Chālukya king Pulikesin wrested Vātāpi (Bādāmi in Bijāpur District) from the Pallavas and made it his capital. His son subdued the Mauryas ruling in the Konkan, and the Kadambas of Banavāsi. Another son conquered the Kalachuris also. Pulikesin II, in the seventh century, came into contact with the Gangas. About 617 the Chālukyas separated into two branches. The Eastern Chālukyas made Vengi (in Kistna District), taken from the Pallavas, and subsequently Rājahmundry, their capital, while the Western Chālukyas continued to rule from Vātāpi, and eventually from Kalyāni (in the Nizām's Dominions). These are styled the Satyāsraya family, from a name of Pulikesin, the first king of this branch, who was a great conqueror. His chief victory was over Harshavardhana, king of KANAUJ, the most powerful monarch in Northern India. By this conquest he gained the title of Paramesvara. Both kings are described by the Chinese pilgrim Hiuen Tsiang. Pulikesin exchanged presents with Khusrū II of Persia. After his death the Pallavas inflicted severe losses on the Western Chālukyas, but Vikramāditya restored their power. He subdued the Pāndya, Chola, Kerala, and Kalabhra kings, and captured Kanchi, forcing the Pallava king, who had never bowed to any man, to place his crown at his feet. The three next kings followed up these victories, until all the powers from the Guptas on the Ganges to the southernmost rulers of Ceylon had submitted to them.

Rāshtrakūtas or Rattas.

But the Rāshtrakūtas, under their kings Dantidurga and Krishna or Kannara, now succeeded in freeing themselves, and

for 200 years from the middle of the eighth century became supreme. They were also called Rattas, and their territory Rattavādi. Their capital, at first Mayūrakhandi (Morkhand in Nasik District), was early in the ninth century at Mānyakheta (Mālkhed in the Nizām's Dominions). They commonly bore the title Vallabha, taken from the Chālukyas, which, in its Prākrit form Ballaha, led to their being called Balharās by Arab travellers of the tenth century. At the end of the eighth century Dhruva or Dhārāvarsha made the Pallava king pay tribute, and defeated and imprisoned the king of the Gangas, who had never been conquered before. During the interregnum thus caused, Rāshtrakūta viceroys governed the Ganga territories, of whom inscriptions tell us of Kambharasa, surnamed Ranāvaloka, apparently a son of Dhārāvarsha, and in 813 Chāki Rājā. Eventually the Rāshtrakūta king Govinda or Prabhūtavarsha released the Ganga king, probably Sivamāra, and replaced him on the throne. Nripatunga or Amoghavarsha had a very long reign during the ninth century, and has left writings in the Kanarese language which show his great interest in the people and country of Karnātaka[1]. His successor was engaged in constant wars with the Eastern Chālukyas. These were subdued in the middle of the tenth century by the Cholas, who thus came into collision with the Rāshtrakūtas, then in intimate alliance with the Gangas. Būtuga of the latter family had married a Rāshtrakūta princess, and helped his brother-in-law Kannara or Akālavarsha to secure the throne. He now rendered him a great service by slaying Rājāditya, the Chola king, at Takkola (near Arkonam). This put a stop to the Chola invasion; and Būtuga was rewarded with the north-western districts of Mysore, in addition to those in the Bombay country which formed the dowry of his bride. In 973 Taila restored the supremacy of the Western Chālukyas, and Indra, the last of the Rāshtrakūtas, died at Sravana Belgola in 982.

Later Gangas.

From the time of Rāchamalla, about 820, the Gangas had again prospered, and all the kings to the end take the title Satyavākya in addition to Permmanadi. Rāchamalla was followed by Nītimārga, and he by Satyavākya and Ereyappa. Then came Būtuga, already mentioned. His successor, Mārasimha, utterly destroyed the Nolambas. With Rakkasa Ganga and a Nītimārga or Ganga Rājā the dynasty came to an end, in the manner related below.

Cholas.

The revival of the Western Chālukya power continued for 200 years, during the first half of which they were engaged in

[1] A small Sanskrit work by him on morality was translated into Tibetan.

continual wars with the Cholas. The latter had from 972 completely subjugated the Eastern Chālukyas of Vengi, whose kingdom was eventually made an apanage of the Chola empire, being ruled by Chola princes as viceroys. At the same time a Chola princess was married to the Kalinga Ganga king still farther north. In 997 the Cholas under Rājarājā had invaded Mysore in the east. In 1004 they reappeared in overwhelming force, under his son Rājendra Chola, took Talakād, and subverted the Ganga sovereignty, capturing all the south and east of the country, up to a line from about Arkalgud through Seringapatam and Nelamangala to Nidugal.

The remaining portions of Mysore, that is, the north and west, were subject to the Western Chālukyas, of whom the most celebrated was Vikramāditya, the son of a Ganga mother, who ruled from 1076 to 1126. Their empire is generally called Kuntala, of which the Banavāse-nād, or Shimoga District, was a principal province. The capital of this was Balligāve, now Belgāmi in the Shikārpur *tāluk*, which contained splendid temples, dedicated to Jina, Buddha, Vishnu, Siva, and Brahmā. Famous scholars were at the head of its five *maths*, where, as in the mediaeval monasteries of Europe, food and medicine were dispensed to all comers. Later Chālukyas.

The Chālukyas were supplanted in 1155 by the Kalachuris in the person of Bijjala, who had been their minister and general. During his time took place the Saiva revival which resulted in the establishment of the Lingāyat creed, still the popular religion of the Kanarese-speaking countries. The Kalachuri power lasted but a short time, till about 1183. Kalachuris.

The local dynasty which rose to dominion in Mysore on the overthrow of the Gangas was that of the Poysalas or Hoysalas, by origin a line of chiefs in the Western Ghāts. Their birthplace was Sosevūr or Sasikapura (now Angadi in Kadūr District). The founder was Sala, who at the exclamation *poy Sala* (strike, Sala!) by a Jain priest slew the tiger that was threatening him, and thence took the name Poysala (of which Hoysala is the modern form), the priest aiding him in establishing a kingdom. The Hoysalas claim to be Yādavas and therefore of the Lunar race. At first they recognized the Western Chālukyas as overlords. Their capital was fixed at Dorasamudra (now Halebīd in Hassan District). In the time of Vinayāditya, who ruled to the end of the eleventh century, the kingdom included Konkana, Alvakheda (South Kanara), Bayalnād (Wynaad), Talakād (the south of Mysore District), and Sāvimale (somewhere north towards the Kistna). His son Ereyanga was a great general Poysalas or Hoysalas.

under the Chālukyas, and among other exploits burnt Dhār, the Mālava capital. He died before his father, and the throne passed to his sons. Of these, Bitti Deva, who ruled from 1104 to 1141, was the most distinguished. Under the influence of the reformer Rāmānuja, who had taken refuge in his kingdom from Chola persecution, he exchanged the Jain faith for that of Vishnu, and took the name of Vishnuvardhana. He also entered upon an extensive range of conquests, an early achievement being the capture of Talakād about 1116. This was followed by the expulsion from Mysore of the Cholas. The boundaries of the kingdom in his reign were extended to the lower *ghāt* of Nangali (Kolār District) on the east; Kongu, Cheram, and Anaimalai (Salem and Coimbatore) on the south; the Bārkanūr *ghāt* road of Konkana on the west; and Sāvimale on the north. Rāmeswaram is also given as a boundary on the south. His own country he gave to the Brāhmans, while he ruled over countries won by his sword. He died at Bankāpur (in Dhārwār) and was succeeded by his son Nārasimha. His grandson, Vīra Ballāla, who came to the throne in 1173, gained such renown that the kings of this family are sometimes called the Ballālas. He won important victories to the north over the Kalachuris and the Seunas (or Yādavas of Deogiri), especially one at Soratūr, and carried the Hoysala kingdom up to and beyond the Peddore or Kistna, taking up his residence at Lokkigundi (Lakkundi in Dhārwār). He reduced all the hill forts about the Tungabhadra, and capturing Uchchangi, which the Cholas, after besieging for twelve years, had abandoned as hopeless, brought into subjection the Pāndyas of that place. His son, Nārasimha II, repulsed the Seunas in the north-west, but was mostly engaged in wars to the south-east, where he overthrew the Pāndya, subdued the Kādava (or Pallava) and Magara kings, and rescued the Chola leader, reseating him on his throne. The Seunas took this opportunity to press southwards, and succeeded in settling in parts of the north-west. Someswara next came to the throne in 1233; and in his time the Seunas attempted to advance as far as Dorasamudra, the capital, but were driven back, though their general, Sāluva Tikkama, claimed some success. The Hoysala king, however, went to live in the Chola country, at Kannanūr or Vikramapura (near Srīrangam and Trichinopoly). On his death in 1254 a partition was made of the Hoysala territories, the capital and the ancestral Kannada kingdom going to his son Nārasimha III, while the Tamil provinces and Kolār District were given to another son, Rāmanātha. The Seunas, under their king

Seunas.

Mahādeva, were again put to flight by Nārasimha. The kingdom was then once more united under Ballāla III, who came to the throne in 1291. During his reign the Musalmāns invaded the country in 1310, under Kāfūr, the general of Alā-ud-dīn of the Khiljī or second Pathān dynasty. The king was defeated and taken prisoner: Dorasamudra was sacked, and the enemy returned to Delhi literally laden with gold. The king's son, carried off as a hostage, was restored in 1313. A later expedition in 1326, sent by Muhammad III of the house of Tughlak, completely demolished the capital. The king seems to have retired to Tondanūr (Tonnūr, north of Seringapatam), but eventually went to live at Unnāmale (Tiruvannāmalai or Trinomalee, in South Arcot). He returned, however, to a place in Mysore called Virūpāksha-pattana (perhaps Hosdurga), and died fighting against the Turakas or Musalmāns at Beribi in 1342. A son Virūpāksha Ballāla was crowned in 1343, but the Hoysala power was at an end.

The last great Hindu empire of the south was established in 1336 at Vijayanagar on the Tungabhadra. Two princes of the Yādava line and Lunar race, named Hakka and Bukka, probably subordinates of the Hoysalas, were aided in founding a new state by Mādhava or Vidyāranya, head of the *math* of Sankarāchārya, the great reformer of the eighth century, at Sringeri in Kadūr District. Hakka took the name of Harihara, in which Vishnu and Siva are combined, but the tutelary deity of the line was Virūpāksha. Harihara was the first king, and was succeeded by Bukka, whose son Harihara II followed. They speedily became paramount throughout the South, but their extension northwards was checked by the foundation in 1347 of the Bahmani kingdom, which was Musalmān. Altogether eight kings of the first or Sangama dynasty ruled till 1479. Among them more than one of the name of Deva Rāya was celebrated. Indeed the first Deva Rāya, son of Harihara II, takes the title Pratāpa, and claims to be the progenitor of a Pratāpa dynasty. The most prominent feature of their period was the sanguinary wars between the Vijayanagar kings and the Bahmani Sultāns of Gulbarga, the description of which fills the pages of Firishta. The wealth and magnificence of the capital are attested by the accounts of the Italian traveller Nicolò de' Conti in 1421, and of Abd-ur-razzāk, Persian envoy to Deva Rāya in 1443. The later kings were less powerful, and Muhammad Shah II was overrunning the whole territory, when he was opposed by Nārasimha, a chief of the Sāluva family, related in some way to the king, whose possessions extended

Vijayanagar.

over Telingāna and the east of Mysore. Though the Sultān captured the strong fort of Mālūr (in Kolār District) and some other places, and plundered Kānchi, Nārasimha staved off the danger, but usurped the throne himself. His son, however, was in turn ousted by his general Narasinga, who belonged to the Yādava race, and was descended from a line of Tuluva kings. He crossed the Cauvery, it is said, when in full flood, and seizing his enemy alive, took possession of Seringapatam. The conquest of the whole of the South followed, and he became the founder of the Narasinga dynasty. About the same period the Bahmani kingdom was broken up by revolts, and five Musalmān States took its place in the Deccan. That which had most to do with Mysore was Bijāpur.

Narasinga's sons, Nārasimha, Krishna Rāya, and Achyuta Rāya, in turn succeeded to the Vijayanagar throne. Krishna Rāya was one of the most powerful and distinguished of its monarchs. He inflicted a severe defeat upon the Muhammadans about 1520, in consequence of which a good understanding prevailed between the courts of Vijayanagar and Bijāpur for a considerable time. One of the earliest expeditions of the reign was against Ganga Rājā, the chief of Ummattūr (in Mysore District), who had rebelled and claimed Penukonda, perhaps as being a Ganga. His main stronghold was on the island of Sivasamudram, at the Falls of the Cauvery, and parts of Bangalore District were known as the Sivasamudram country. Krishna Rāya captured his fort at the Falls, and also took Seringapatam. He extended the limits of the empire until they reached to Cuttack on the east, and to Goa on the west. He was a great patron of Sanskrit and Telugu literature. Interesting accounts of the capital in his reign have been left by Duarte Barbosa. On the death of Achyuta his infant son succeeded, but died early. His nephew Sadāsiva Rāya was then placed on the throne by the great minister Rāma Rājā, who was his brother-in-law, and by the council. But Rāma Rājā himself wielded the chief power of the State. In spite of great ability, his arrogance was such that the Musalmān States of Bijāpur, Golconda, Ahmadnagar, and Bīdar were provoked to combine in an attack on Vijayanagar as their common enemy. In the battle of Tālikotā near Raichūr, on January 23, 1565, Rāma Rājā was slain, on which the Hindu army fled panic-stricken, and the royal family escaped to Penukonda. The victorious Muhammadans marched to Vijayanagar, which they utterly sacked and destroyed. Cesare de Federici describes the desolation which ensued.

Rāma Rājā's brother, Tirumala Rājā, removed the capital to Penukonda, and his son succeeded to the throne left vacant by Sadāsiva Rāya, thus establishing the Rāma Rājā dynasty. In 1577 Penukonda was bravely defended against the Musalmāns by Jagadeva Rāya, who was the king's father-in-law, and became chief of Channapatna (Bangalore District). In 1585 the capital was again removed, now to Chandragiri. But the empire was breaking up. In 1610 the Mysore king seized Seringapatam, and other feudatories began to throw off their allegiance. It was in 1639 that the English obtained from Srī Ranga Rāya the settlement of Madras. Six years later, Chandragiri and Chingleput, another nominal capital, being taken by the forces of Golconda, the king fled to the protection of Sivappa Naik of Bednūr (Shimoga District), who installed him at Sakkarepatna and neighbouring places, and attempted to besiege Seringapatam under pretence of restoring him. But with him the empire ended. A member of the family established himself at Anegundi, on the opposite side of the river to Vijayanagar; and his line continued till 1776, when Tipū Sultān overran the whole country, dispossessed the reigning chief, and burnt Anegundi. Some survivors of the line are still there.

Poligārs.

During the fifteenth and sixteenth centuries the Vijayanagar kings had bestowed on, or confirmed to, vassal chiefs, bearing various titles, sundry tracts in Mysore, on the condition of paying tribute and rendering military service. Those in the north were controlled direct from the capital. The southern chiefs were under a viceroy, termed the Srī Ranga Rāyal, at Seringapatam. After the disaster of Tālikotā, although a nominal allegiance continued to be paid to the viceroy, such of the chiefs as had the power gradually declared their independence. Among these were the Naiks of Keladi or Bednūr, Basavāpatna, and Chitaldroog in the north; the Naiks of Belūr in the west; the Naiks of Hāgalvādi, and the Gaudas of Yelahanka and Ballāpur, in the centre; the Gauda of Sugatūr in the east; the Changālvas, and the Wodeyars of Mysore, Kalale, Ummattūr, and others, in the south. These *poligārs* [1], as they were called, will be noticed in connexion with their respective Districts.

Bijāpur and Ahmadnagar entered into a mutual agreement in 1573 to extend their conquests in such directions as not to interfere with one another. The Bijāpur line was to the south. Adoni having been captured, and the west coast regions over-

[1] Properly *pālayagāra*, the holder of a *pālaya* or baronial estate.

run, an attempt was made in 1577 on Penukonda. But it found a gallant defender, as before stated, in Jagadeva Rāya, who forced the Bijāpur army to retire. For this brilliant service, his territory of Bāramahāl was extended across Mysore to the Western Ghāts, and he made Channapatna his capital. At about the same period Tamme Gauda of Sugatūr rendered some important service, for which he received the title of Chikka Rāya, with a grant of territory from Hoskote in the west to Punganūr in the east. Meanwhile the Rājās of Mysore had been absorbing all the lesser States to their south, till in 1610 they secured Seringapatam, ousting the effete viceroy. In 1613 they took Ummattūr, in 1630 Channapatna, and in 1644 uprooted the Changālvas in Piriyāpatna, thus becoming the dominant power in the south of the country.

Bijāpur. But in the north and east an invasion by Bijāpur in 1636 was successful. After the appointment of Aurangzeb as viceroy of the Deccan, Bijāpur became tributary to Delhi. Its arms were then directed to the south, under Randullah Khān, accompanied by Shāhji, father of the famous Sivajī, as second in command, with the promise of a *jāgīr* in the territories to be conquered. The Bednūr kingdom was now overrun, and the chief besieged in Kavaledurga, but he bought off the enemy. An attempt on Seringapatam was repulsed with great slaughter by Kanthīrava, the Mysore Rāja. The invaders then captured Bangalore and Kolār District in 1639, and, descending the Ghāts, took Vellore and Gingee. On returning to the table-land, Dod-Ballāpur, Sīra, and the south of Chitaldroog District fell into their hands by 1644. A province named Carnatic-Bijāpur-Bālāghāt was now formed, including Kolār, Hoskote, Bangalore, and Sīra. This was bestowed as

Shāhji. a *jāgīr* on Shāhji, who was also governor of the conquered territory below the Ghāts, called Carnatic-Bijāpur-Pāyanghāt. Under him a large Marāthā element was introduced into Mysore. Shāhji died in 1664, and his son Venkojī or Ekojī, who lived at Tanjore, inherited his father's possessions. But Sivajī, the only surviving son of the first marriage, resolved to claim a half-share. To enforce this he overran the Carnatic provinces above and below the Ghāts in 1677, and in the end Venkojī was induced to agree to a partition, by which he retained Tanjore.

Mughals. In 1684 the Mughal arms, under Aurangzeb, were once more directed to the Deccan for the purpose of crushing the Marāthās, and subjugating the Muhammadan States of Bijāpur and Golconda. Bijāpur was taken in 1686, Golconda in 1687.

Flying columns were sent out after each of these captures to secure the dependent districts south of the Tungabhadra. A new province was thus formed in 1687, with Sīra (Tumkūr District) as the capital. It was composed of the seven *parganas* of Basavāpatna, Būdihāl, Sīra, Penukonda, Dod-Ballāpur, Hoskote, and Kolār; and it had, as tributary States, Harpanahalli, Kondarpi, Anegundi, Bednūr, Chitaldroog, and Mysore. Bangalore was sold to the Rājā of Mysore for 3 lakhs of rupees, the sum he had agreed to give for it to Venkojī, who finding it too far off to control had offered it for sale. Kāsim Khān, with the designation of Faujdār Dīwān, was the first governor of this province of Sīra. It continued a Mughal possession till 1757.

Mysore Rājās. We must now retrace our steps, to relate the history of the Mysore family. Their origin is ascribed to two Kshattriya princes of the Yādava race, named Vijaya and Krishna, who came from Dwārka in Kāthiāwār to the south in 1399, and, being pleased with the country, took up their abode in Mahishur or Mysore, the chief town. Here they heard that the Wodeyar or chief of Hadinādu, a few miles to the south-east, had wandered away, being out of his mind, and that the neighbouring chief of Kārugahalli, who was of inferior caste, taking advantage of the defenceless condition of the family, had demanded the only daughter of the house in marriage. To this a consent had been given under compulsion, and arrangements unwillingly made for the ceremony. The two brothers resolved to espouse the cause of the distressed maiden, and having secreted themselves with some followers, fell upon the chief and his retinue while seated at the banquet and slew him. Marching at once on Kārugahalli, they surprised it and returned in triumph to Hadinādu, where the girl became the willing bride of Vijaya, who took the title of Odeyar or Wodeyar, and assumed the government of Hadinādu and Kārugahalli, with a profession of the religion of the Jangama or Lingāyats. The fourth king, Chāma Rājā III, who reigned from 1513 to 1552, made a partition of his dominions between his three sons. To Chāma Rājā IV, surnamed Bol or 'bald,' he gave Mysore, and, no male heir surviving to either of the other brothers, the succession was continued in the junior or Mysore branch.

It was in the time of Chāma Rājā IV that the fatal disaster of Tālikotā befell the Vijayanagar empire, and the authority of its viceroy at Seringapatam was in consequence impaired. Accordingly Chāma Rājā evaded payment of tribute, while the

imbecile viceroy attempted in vain to arrest him. When, after the short reign of his elder brother, Rājā Wodeyar was raised to the throne by the elders, the fortunes of the royal family became established. He contrived in 1610 to gain possession of Seringapatam, ousting the aged viceroy Tirumala Rājā, who retired to Talakād. In 1613 Rājā Wodeyar subdued Ummattūr and annexed its possessions to Mysore. He also made some acquisitions northwards from Jagadeva Rāya's territories. His policy was to suppress the Wodeyars or local chiefs and to conciliate the ryots. He was followed by his grandson Chāma Rājā VI, who pursued the same policy, and by the capture in 1630 of Channapatna absorbed into Mysore all the possessions of Jagadeva Rāya.

Rājā Wodeyar.

Of the succeeding kings, Kanthīrava Narasa Rājā was distinguished. The year after his accession in 1638 he had to defend Seringapatam against the Bijāpur forces, and, as already related, drove them off with great slaughter. He extended the kingdom on all sides, taking Satyamangalam and other places from the Naik of Madura southwards; overthrowing the Changālvas in the west, thus gaining Piriyāpatna and Arkalgud; capturing Hosūr (now in Salem) to the north; and inflicting a severe defeat at Yelahanka on Kempe Gauda of Māgadi, who was forced to pay a heavy contribution. He added to and strengthened the fortifications of Seringapatam, assumed more of royal state at his court, and was the first to establish a mint, where were coined the Kanthirāya (Canteroy) *huns* and *fanams* named after him, which continued to be the current national money of Mysore until the Muhammadan usurpation. He died without issue, and of two claimants to the throne, Dodda Deva Rājā, grandson of Bol Chāma Rājā, was selected. It was during his reign that Srī Ranga Rāya, the last representative of Vijayanagar, fled for refuge to Bednūr. Sivappa Naik, the head of that State, on the plea of restoring the royal line, appeared before Seringapatam with a large force. But he was compelled to retreat, and the Mysore armies overran the parts in the west which he had conferred on Srī Ranga Rāya. The Naik of Madura now invaded Mysore, but was also forced to retire, while Mysore troops, capturing Erode and Dhārāpuram, levied contributions from Trichinopoly and other chief places. Dodda Deva was a great friend of the Brāhmans, and profuse in his donations to them. He died at Chiknāyakanhalli, then the northern boundary of the State, the southern being Dhārāpuram in Coimbatore. The western and eastern boundaries were Sakkarepatna and Salem. Chikka Deva Rājā,

Kanthīrava Narasa Rājā.

Dodda Deva Rājā.

Chikka Deva Rājā.

previously passed over, now came to the throne, and proved to be one of the most distinguished of his line. When a youth at Yelandūr he had formed a friendship with a Jain *pandit*, who was now made the minister, though obnoxious on account of his faith. A regular postal system was for the first time established, which was also utilized for detective purposes. Maddagiri and other places to the north were conquered, making Mysore conterminous with Carnatic-Bijāpur-Bālāghāt, then disorganized by the raids of Sivajī. For ten years following a variety of vexatious petty taxes were imposed, in order to increase the revenue without incurring the odium of enhancing the fixed land tax. Great discontent ensued, fanned by the Jangama priests. The ryots refused to till the land, and, deserting their villages, assembled as if to emigrate. The king resolved upon a treacherous massacre of the Jangama priests, and this sanguinary measure stopped all opposition to the new financial system, but the minister was assassinated as being the instigator of the innovations. With his dying breath he recommended as his successor a Brāhman named Tirumalārya, one of the most learned and eminent ministers of Mysore.

This brings us to 1687, when the Mughals, having captured Bijāpur, were forming the province of Sīra. Venkojī had agreed, as before related, to sell Bangalore to the Mysore Rājā for 3 lakhs of rupees. But Kāsim Khān, the Mughal general, first seized it and then carried out the bargain, pocketing the money himself. Through him the Rājā assiduously cultivated an alliance with Aurangzeb, and meanwhile subdued such parts of the country as would not interfere with the Mughal operations. A great part of Bāramahāl and Salem below the Ghāts was thus added to Mysore, and by 1694 all the west up to the Bābā Budan mountains. In 1696 the territory of the Naik of Madura was invaded and Trichinopoly besieged. In the absence of the main army, a Marāthā force marching to the relief of Gingee suddenly appeared before Seringapatam, attracted by the hope of plunder. The Mysore army, recalled by express, returned by forced marches, and by a skilful stratagem totally defeated the enemy, who lost everything. Kāsim Khān now died; and the king, in order to establish fresh interest at court and obtain if possible recognition of his new conquests, sent an embassy to the emperor at Ahmadnagar, which returned in 1700 with a new signet, bearing the title Jug Deo Rāj, and permission to sit on an ivory throne. The king now formed the administration into eighteen departments, in imitation of what the envoys had seen at the Mughal court.

He died in 1704, at the age of seventy-six, having accumulated a large treasure, and notwithstanding the troublous times, established a secure and prosperous State, extending from Palni and Anaimalai in the south to Midagesi in the north, and from Carnatic Garh in Bāramahāl in the east to Coorg and Balam in the west.

Dodda Krishna Rājā.

In the reign of Dodda Krishna Rājā (1713-31) the Nawāb of Sīra's jurisdiction was restricted to the Bālāghāt, a separate Nawāb of Arcot being appointed to the Pāyanghāt. The ascendancy of the throne in Mysore began to decline, and all power fell into the hands of the ministers, Devarāj and Nanjarāj[1]. At frequent intervals armies sent by the rival Nawābs or by the Sūbahdār of the Deccan appeared, claiming contributions and, if they could not be driven away, had to be bought off. When at length the Marāthās appeared in 1757 under Bālāji Rao, so impoverished had the State become that several *tāluks* were pledged to them as security to induce them to retire.

Haidar Alī.

Meanwhile, at the siege in 1749 of Devanhalli, then a frontier fortress, a volunteer horseman had come to notice who was destined before long to gain the supreme power in the State and to play no mean part in the history of India. This was Haidar Alī, whose courage in the field induced Nanjarāj to give him a command. He managed to increase his force; and amid the struggles between rival candidates for the Nawābship of the Carnatic, supported by the English and French respectively, he secured for himself valuable booty. His services before Trichinopoly led to his appointment as Faujdār of Dindigul (Madura District), where he added to his force and enriched himself by wholesale plunder. The army at the capital having become mutinous on account of their pay being in arrears, Haidar was sent for to settle the disputes, which he did with unscrupulous ability. The fort and district of Bangalore were now given to him as a *jāgīr*. On his advice the Marāthās had been expelled from the pledged *tāluks* when the rains set in and farther invasion was at the time impossible. They appeared again in 1759 in great force under Gopāl Hari. Haidar was appointed to the chief command to oppose them, and by his skill rescued Bangalore and Channapatna, whereupon the Marāthās, finding themselves outdone, agreed to leave

[1] There were two of this name. The first Nanjarāj was a cousin of Devarāj, who on his deathbed, in 1740, refunded 8 lakhs of rupees, estimated as the amount he had improperly acquired. He was succeeded by the second Nanjarāj, a younger brother of Devarāj.

the country on payment of a certain sum in discharge of all claims. Returning in triumph to Seringapatam, he was received in a splendid *darbār*, where Nanjarāj rose up to embrace him, and he was saluted with the title Fateh Haidar Bahādur. The pay of the troops before long again fell into arrears, and again Haidar had to satisfy them, for which purpose more than half the country was placed in his hands, while Nanjarāj was forcibly retired.

In 1760 the French commander Count de Lally, cooped up by the English in Pondicherry, sought the aid of Haidar, and a treaty was made. When his troops had gone away on this expedition, Khande Rao, his coadjutor in all his schemes hitherto, turned against him and induced the Rājā's party to try and get rid of him. A cannonade was suddenly opened on his camp near Seringapatam, and he was forced to flee for his life. Bangalore was gained just in time, and collecting his scattered forces, assisted by some French, he marched against Khande Rao, by whom he was defeated near Nanjangūd. All now seemed lost, but he repaired secretly to Nanjarāj and persuaded him to resume his authority. Armed with this, he contrived a stratagem by which Khande Rao was completely deceived, and fled under the impression that he was betrayed, leaving all his forces to go over to Haidar. The latter reconquered the southern districts and returned to Seringapatam at the head of a great army, with which, again by stratagem, he got possession of the island. The Rājā was now at his mercy; Khande Rao was given up, and Haidar's usurpation was inevitable, though he always maintained a royal occupant on the throne.

Haidar soon subdued all the petty States to the east and north of the country, and marched against Bednūr, which was taken in March, 1763, and a booty valued at twelve millions sterling fell into his hands, together with the countries on the west coast. This conquest was always spoken of by him as the foundation of his subsequent greatness. He conceived the idea of making a new capital for himself here, and gave it the name of Haidarnagar (now Nagar). He established a mint, from which coins in his own name were issued, and formed a dockyard and naval arsenal on the coast. But he had to reckon with the Marāthās and the Nizām, who laid claim to some of the countries he had conquered. He was defeated by the former at Rattihalli, but contrived by negotiations to retrieve his fortunes with both powers. When, before long, they again planned a joint invasion of Mysore, he bought

off the Marāthās and induced the Nizām to join with himself against the British. These he attacked in 1767, but they forced the Nizām to break off the alliance, and in 1769 peace was concluded with Haidar. It is impossible here to follow in detail all the operations and varying fortunes of the wars which Haidar, supported by the French, waged against the British. His last invasion of the British territories was in July, 1780, and while the war was in progress he died in camp near Arcot on December 7, 1782, at the age of sixty. An unlettered adventurer, he had raised himself to a throne and founded a kingdom.

Tipū Sultān.

His son and successor, Tipū, had not the ability of his father; his mind was warped by a fanatical bigotry, and he bore the most inveterate hatred against the British. The war with them was prolonged until 1784, when a treaty of peace was concluded, followed by a successful war with the Marāthās and the Nizām. Expeditions to the west coast followed, in which the most cruel persecutions befell the inhabitants. The only country there which Tipū had not subdued was Travancore, which was under the protection of the British. But at the end of 1789 he invaded it, and the British at once prepared for war, having the Marāthās and the Nizām as allies. Lord Cornwallis, the Governor-General, himself took command of the army. After capturing Bangalore and many of the strongest hill forts around, he besieged Seringapatam with such vigour that, in February, 1792, Tipū was driven to accept the terms offered him: namely, the surrender of half his territories, the payment of 3 crores and 30 lakhs of rupees, and the delivery of two of his sons as hostages. With his misfortunes the Sultan's caprice, fanaticism, and spirit of innovation were carried to the verge of insanity. He began to alter everything in the country. The name of every object was changed; of cycles, years, and months; of weights, measures, and coins; of forts and towns; of offices, military and civil; the official designation of all persons and things: a strange parody of what was happening in France, of which he had probably heard something. Exports and imports were prohibited, in order to protect domestic trade; the growth of poppy for opium was stopped, and all liquor shops abolished, to prevent intoxication. Grants to Hindu temples and *ināms* of *pātels* were confiscated. The fine old irrigation works were to be destroyed and reconstructed in his own name. His evident aim was to obliterate every trace of previous rulers, and to introduce a new order of things beginning with himself. On the death in 1796 of the pageant

Rājā, no successor was appointed, and the royal family were turned out of the palace, stripped of all.

Tipū next strained every nerve to form a coalition for the expulsion of the British from India. Embassies were sent to Constantinople and Kābul; letters to Arabia, Persia, and Maskat; agents to Delhi, Oudh, Hyderābād, and Poona; proposals to Jodhpur, Jaipur, and Kashmīr. The French in particular were repeatedly applied to, and Bonaparte's invasion of Egypt encouraged the hope of immediate aid, while overtures were made by him to Tipū. But Nelson's great victory at the Nile soon put an end to Bonaparte's designs on the East. Lord Mornington, the Governor-General, had called on the Sultān for an explanation of his proceedings, and receiving evasive answers, resolved on war. The Nizām and the Marāthās were again united with the British. General Harris, in command of the grand army, having defeated Tipū at Malavalli, sat down before Seringapatam on April 5. The Sultān opened negotiations; but the time having passed away without his accepting the terms offered, the fortress was carried by assault on May 4, 1799, and his body was found among the slain.

Krishna Rājā Wodeyar.

After mature deliberation it was decided to restore the descendant of the former Rājās, under British protection, to the sovereignty of part of the dominions thus left vacant, and to divide the rest among the allies. The young prince, Krishna Rājā Wodeyar, five years old, was placed on the throne on June 30. Colonel Arthur Wellesley (the future Duke of Wellington) was invested with the entire civil and military control of the State; Pūrnaiya, the trusted minister of Haidar and Tipū, was made Dīwān; and Colonel (afterwards Sir) Barry Close was appointed Resident. Colonel Wellesley soon put down the marauding chiefs who strove to establish themselves in various parts, the country was reduced to good order, and the government was eminently successful. A considerable portion of the Mysore army subsequently took part in the war against the Marāthās, marked by Wellesley's decisive victories on the fields of Assaye and Argaon.

In 1811 the Rājā, having come of age, was entrusted with the government and Pūrnaiya retired, dying the following year. The reign began with the brightest prospects, but the Rājā's extravagance and lack of governing ability soon brought the affairs of a prosperous country to the verge of ruin. By 1814 the treasure accumulated by Pūrnaiya had been dissipated on worthless favourites, the pay of the army was in arrears, and the counsels of good advisers were unheeded. Offices of state

were sold to the highest bidder, and the revenue was realized under an oppressive system called *sharti*. The jails were filled with prisoners awaiting sentence, to award which the judges had no power. The British Government warned the Rājā of the consequences of his reckless conduct, and in 1825 Sir Thomas Munro, Governor of Madras, personally visited Mysore to remonstrate with him. But little good resulted, and in 1830 disaffection came to a head in the Nagar country. A pretender was set up, and the insurrection spread to other parts. The State troops were sent against the insurgents, but they continued to increase in strength, and it became imperative to employ the British subsidiary force. After various operations, Nagar was taken and the rebellion brought to an end.

Mysore Commission.

The British Government now appointed a Committee to inquire into the affairs of Mysore; and on their report the Governor-General, Lord William Bentinck, resolved to act upon a clause of the original treaty made with the Rājā, and to deprive him of ruling power. In October, 1831, he peaceably surrendered the reins of government to the British Commissioners appointed to administer the country. The Rājā himself was allowed to remain at the capital, and a liberal provision was made for him. The Mysore Commission consisted at first of a very few British officers, at the head of whom from 1834 was Colonel (afterwards Sir) Mark Cubbon. It was an onerous task to free the administration from the abuses of long standing which had crept into every department, and to place the revenues on a sound basis. But his wise and patient measures gradually bore fruit in a people made happy by release from serfdom, and a ruined State restored to financial prosperity. No less than 769 petty items of taxation were swept away, but the revenue continued to rise; and numberless oppressive practices were remedied. The Governor-General, Lord Dalhousie, visited Mysore in 1855, and recorded his full appreciation of what had been done, but considered that the time had come to bring the system of administration into accordance with modern ideas. Judicial, public works, and educational departments were therefore formed, and a larger British element brought in. In 1861 Sir Mark Cubbon fell ill, and retired from the position he had so long filled with such great honour.

The Rājā had no male heir; and though his loyalty in the Mutiny was undoubted, a *sanad* of adoption was not granted to him by Lord Canning, on the ground that he was

not a ruling chief. The Rājā, however, exercised his right as a Hindu, and adopted a son in 1865; and after some deliberation the adoption was recognized in 1867 as valid in regard to the succession also. With the satisfaction that his dynasty would be continued, he died in 1868, at the ripe age of seventy-four.

Meanwhile, many changes had been made in the administration of Mysore, bringing it more into line with the Regulation Provinces. On Mr. Bowring, who succeeded Sir Mark Cubbon in 1862, the introduction of these innovations devolved. The State was portioned into new Divisions and Districts, with a larger staff of British officers. Revenue survey and *inām* settlement, channel and forest conservancy, village schools and municipalities, were some of the new measures brought into operation before the recognition by the British Government of a successor to the throne and during the minority of the new Rājā. Regulation system.

This young prince was carefully trained for his position under European tutors; and on his attaining majority, the rendition of Mysore was carried out on March 25, 1881, on terms embodied in an Instrument of Transfer[1], which superseded all former treaties. The powers of the Mahārājā were defined, and the subsidy to be paid in lieu of military assistance was enhanced. Mr. C. Rangāchārlu was appointed Dīwān, and continued at the head of the administration till his death in 1883. He was assisted by a small Council, and the formation of what was called a Representative Assembly was one of the prominent measures of his time. The reduction of expenditure being imperative, owing to the disastrous effects of the famine of 1876–8, European officers were freely dispensed with, many posts were abolished, various Districts broken up, and judicial offices and jails reduced. The British Government gave substantial relief by postponing the levy of the enhanced subsidy of 10½ lakhs for five years. Chāma Rājendra Wodeyar.

Mr. (from 1893, Sir) K. Sheshādri Iyer succeeded as Dīwān; and during his tenure of office, which he held till near his death in 1901, Mysore was raised to a high state of prosperity. Protection against famine, which had again threatened the State in 1884 and 1891, was specially in view in the earlier operations. Railways and irrigation works were pushed on, and the British Government again postponed for ten years the payment of the increased subsidy. By that time the revenue had more than doubled, the State debts had been

[1] See *Mysore Gazetteer* (1897 edition), vol. i, p. 450.

extinguished, and surplus funds had accumulated in the treasury. This result was not due to new taxation in any form or shape. Next to good seasons, it was the effect of natural growth, under the stimulus afforded by the opening out of the country by means of new roads and railways, the execution of important irrigation works, and the general expansion of industries, as well as in some measure of a better management of particular sources of revenue. Every branch of the administration was strengthened and improved; public works of unsurpassed magnitude were carried out; gold-mining was fostered in such a manner as to bring in a very substantial addition to the coffers of the State; postal facilities were greatly increased; cavalry and transport corps were maintained for imperial defence; educational institutions and hospitals were established on a large scale; civil service examinations of a high standard were instituted; departments were formed for archaeology and for the management of religious and charitable institutions, later also for meteorology and geology; laboratories were founded for bacteriology and agricultural chemistry; and, to crown all, the Cauvery Falls were harnessed and the first electric power works in India installed. To glance at the reverse of the shield, the fell spectre of plague appeared at Bangalore in August, 1898, and has since stalked through all parts. But this dire foe was vigorously grappled with. Congested areas were opened out, and general sanitary improvements enforced. The vacancy in the office of Dīwān was filled in 1901 by Mr. (now Sir) P. N. Krishna Mūrti, descended from Pūrnaiya, who was succeeded in 1906 by Mr. V. P. Mādhava Rao.

Mahārānī Regent.

At the end of 1894 occurred at Calcutta the sudden death of the universally respected Mahārājā Chāma Rājendra Wodeyar, in whose person the administration of Mysore had been revived in 1881, and the Mahārānī became Regent during the minority of her eldest son. This young prince, Krishna Rājā Wodeyar, who has been assiduously trained by European tutors, on attaining his majority was invested with power in 1902 by the Viceroy in person.

Krishna Rājā Wodeyar.

Archaeology. Inscriptions.

An epigraphic survey has been completed of the whole State[1], and about 9,000 inscriptions copied *in situ*[2]. The

[1] An Archaeological department was formed in 1890, under Mr. Lewis Rice, who had been engaged for some years previously in archaeological work in conjunction with other duties.

[2] These are published in a series called *Epigraphia Carnatica*, extending to twelve volumes.

most memorable discovery was that of edicts of Asoka in the Molakālmuru *tāluk* in 1892, which lifted the veil that hid the ancient history of the South and marked an epoch in Indian archaeology. These and the Jain inscriptions at Sravana Belgola relating to Chandra Gupta and Bhadrabāhu, and the Sātakarni inscription at Malavalli in the Shikārpur *tāluk*, have filled up the gap between the rise of the Mauryas and that of the Kadambas. The origin and accession to power of the latter have been made clear by the Tālgunda pillar-inscription in the same *tāluk*, while the Vokkaleri plates from Kolār District threw light upon the true significance of the Pallavas. The forgotten dynasties of the Mahāvalis or Bānas, and of the Gangas who ruled Mysore for so long, have been restored to history. The chronology of the Cholas has for the first time been definitely fixed. The birthplace of the Hoysalas has been discovered, and their history worked out in detail. Most important additions have been made to the information relating to the Chālukyas, the Rāshtrakūtas, the Nolambas, the Seunas, the Vijayanagar kings, and other more modern dynasties.

Coins. There have been finds of prehistoric punch-marked pieces, called *purāna* by the earlier Sanskrit writers, at Nagar; of Buddhist leaden coins of the Andhra period, second century B.C. to second century A.D., at Chitaldroog; and of Roman coins dating from 21 B.C. to A.D. 51, near Bangalore. Hoysala coins, before unknown, have been identified and their legends deciphered. The diversified coins of the modern States that occupied Mysore, and of Haidar and Tipū, have been tabulated and described.

Palm-leaf manuscripts. Palm-leaf manuscripts have been collected, bringing to light the Kanarese literature from the earliest period, which had been lost in oblivion [1].

Stone monuments. Prehistoric stone monuments, such as cromlechs and kistvaens, are found in most of the rocky parts. The latter, generally called *Pāndu koli*, are known in Molakālmuru as *Moryara mane*, 'houses of the Moryas' or Mauryas, and they are so named also among the Badagas of the Nīlgiris. Stone slabs erected as memorials of heroes who fell in battle are called *vīrakal*. They are sculptured with bas-reliefs, of which the bottom one depicts the hero's last fight, and the others his triumphal ascent to paradise and rest there. Similar memo-

[1] See introduction to *Karnātaka-Sabdānusāsana*. This and other classical works are being published in a series called *Bibliotheca Carnatica*, of which six volumes have been issued.

rials to widows who have become *satī* and been burnt with their husbands are called *māstikal*. They bear the figure of a post with a human arm extended from it, holding a lime between the thumb and forefinger. These are found mostly in the west.

Architecture. The Jain temples are called *basadi* or *bastī*, and are in the Dravidian style. The chief group is on Chandragiri at Sravana Belgola. They are more ornamental externally than Jain temples in the North of India, and, Fergusson considers, bear a striking resemblance to the temples of southern Babylonia. In front is often a *māna-stambha*, a most elegant and graceful monolith pillar, 30 to 50 feet high, surmounted by a small shrine or statue—lineal descendants, says the same authority, of the pillars of the Buddhists. But the Jains also have *bettas*, literally 'hills,' which are courtyards on a height, open to the sky, and containing a colossal nude image of Gomata. That at Sravana Belgola is 57 feet high [1], and stands on the summit of Indragiri, 400 feet in elevation. It was erected about 983 by Chāmunda Rāya, minister of the Ganga king. Nothing grander or more imposing, says Fergusson, exists anywhere out of Egypt, and even there no known statue exceeds it in height.

The Hindu temples are of either the Chālukyan or the Dravidian style. The Hoysalas were great promoters of art, and temples erected by them or under their patronage in the twelfth and thirteenth centuries, in the highly ornate Chālukyan style, are not surpassed by any in India. The best existing examples are those at Halebīd, Belūr, and Somanāthpur. Fergusson, than whom there is no higher authority, says:—

> 'The great temple at Halebīd, had it been completed, is one of the buildings on which the advocate of Hindu architecture would desire to take his stand. The artistic combination of horizontal with vertical lines, and the play of light and shade, far surpass anything in Gothic art. The effects are just what mediaeval architects were often aiming at, but which they never attained so perfectly [2].'

Examples of temples in the Dravidian style, of which the *gopuram* or pyramidal tower is generally the most imposing

[1] The only other two known, which are in South Kanara and much more modern, their dates being 1431 and 1603, are 41 and 37 feet high.

[2] *History of Indian and Eastern Architecture*. See also *Architecture of Dharwar and Mysore*, where he says: 'It is worthy of remark that the great architectural age in India should have been the thirteenth century, which witnessed such a wonderful development of a kindred style [meaning the Gothic] in Europe.'

feature, may be seen at Seringapatam, Chāmundi, Melukote, and other places in the south. The bridges of Hindu construction at Seringapatam and Sivasamudram are noticed in connexion with the CAUVERY.

Of Saracenic architecture the best remains are the Mughal buildings at Sīra, and the Pathān mosque at Sante Bennūr. The Gumbaz or mausoleum of Haidar and Tipū at Ganjam and the mosque at Seringapatam deserve notice. But the most ornamental is the Daryā Daulat, Tipū's summer palace at the latter place. Mr. J. D. Rees, who has travelled much in India and Persia, says :—

'The lavish decorations, which cover every inch of wall from first to last, from top to bottom, recall the palaces of Ispahān, and resemble nothing that I know in India.'

The temples of the Malnād in the west correspond in style to those of Kanara. The framework is of wood, standing on a terrace of laterite, and the whole is covered with a tiled and gabled roof. The wooden pillars and joists are often well carved.

Population.

The table below gives details of the population of the State and its constituent Districts as returned at the Census of 1901 :—

District.	Area in square miles	Number of Towns.	Number of Villages.	Total population. Persons.	Total population. Males.	Total population. Females.	Urban population. Persons.	Urban population. Males.	Urban population. Females.	Persons per square mile in rural areas.
Bangalore .	3,092	18	2,750	879,263	441,912	437,351	230,147	116,466	113,681	212
Kolār . .	3,180	12	3,409	723,600	367,683	355,917	88,860	47,745	41,115	201
Tumkūr .	4,158	18	2,753	679,162	342,070	337,092	58,668	29,331	29,337	149
Mysore . .	5,496	27	3,212	1,295,172	641,150	654,022	163,062	81,389	81,673	206
Hassan . .	2,647	14	2,546	568,919	283,043	285,876	45,901	23,207	22,694	197
Kadūr . .	2,813	10	1,352	362,752	190,126	172,626	40,698	21,739	18,959	115
Shimoga .	4,025	14	2,017	531,736	277,258	254,478	41,236	21,082	20,154	122
Chitaldroog	4,022	15	1,440	498,795	253,782	245,013	53,531	26,918	26,613	111
Total	29,433	128	19,479	5,539,399	2,797,024	2,742,375	722,103	367,877	354,226	164

Density.

Taking the natural divisions of Malnād and Maidān, 17 per cent. of the area of the State and 12 per cent. of the population belong to the first, and the remainder to the second. The mean density is 185 persons per square mile. Mysore is the largest District, and contains the dynastic capital. Its total population is the highest, but in density of rural population it stands second. Bangalore District, the sixth in area, is second in total population and first in density of rural population. In it are situated the administrative capital of Mysore, and the Civil and Military Station with its large garrison,

which is an Assigned Tract under British administration. The most populous *tāluks* are those watered by the Cauvery, with Bangalore and Anekal.

Towns and villages.

The urban population is 13 per cent. of the whole. Four places have been treated as cities in the Census of 1901: namely, Mysore, Bangalore, the adjoining British Civil and Military Station, and the Kolār Gold Fields. The population of Bangalore (taking the city and Civil and Military Station together) was 159,046, of Mysore city 68,111, and of the Gold Fields 38,204. Owing chiefly to plague, there had been since 1891 a loss of 21,320 in Bangalore and of 5,937 in Mysore, while, in spite of plague, the Gold Fields gained 31,119. The number of towns is 124, of which Mysore, Tumkūr, and Bangalore Districts contain 26, 18, and 16 respectively, and Kolār and Kadūr only 11 and 10. A town is a municipality of whatever size, or a place not absolutely rural containing a population of 5,000 and above. Only five of these towns have a population exceeding 10,000—Kolār, Tumkūr, Channapatna, Dāvangere, and Tarikere—while the population of twenty-seven lies between 5,000 and 10,000, of which eight belong to Mysore and five to Bangalore District. The inhabited villages number 16,884. In the Maidān a village may have dependent hamlets grouped with it. In the Malnād, villages are often such only in name, being composed of scattered homesteads at various distances apart. The towns and villages vary little as regards the main occupations and habits of life of the people, but those which are also market places or *tāluk* head-quarters become centres of trade and home industries. The number of houses per square mile rose from 25 in 1881 to 37 in 1901, and the occupants per house averaged 5 at the latter date as compared with 5·6 twenty years before.

Growth of population.

The variation in total population at each Census has been: (1871) 5,055,102, (1881) 4,186,188, (1891) 4,943,604, and (1901) 5,539,399. The fall in 1881 was due to the great famine of 1876–8, but was almost compensated by the rise in 1891. In spite of plague the last Census shows a marked general increase of 12 per cent. The rise has been greatest in Kolār and Chitaldroog Districts, and least in Kadūr, the population of which has scarcely varied. The increase in the Districts of Mysore, Hassan, and Shimoga is below the average.

Migration.

In 1901, according to the census returns, 306,381 persons enumerated in the State had been born out of it, and 132,342

born in the State were registered elsewhere. The greatest increase of foreign immigrants is of course in Kolār, in connexion with the gold-mines. But all the Districts show an increase under this head, especially Hassan and Kadūr, which are coffee-growing tracts.

The percentage distribution of the total population under different age periods is as follows: 13·03 of ages 0 to 5; 26·87 of 5 to 15; 22·01 of 15 to 30; 20·63 of 30 to 45; 11·93 of 45 to 60; and 5·51 of 60 and over. Females are in a total ratio of 981 to 1,000 males, but they exceed males at ages 3 to 4, 20 to 35, 50 to 55, and at 60 and over. Age statistics.

Except in Bangalore city and Civil and Military Station, and in Mysore city, vital statistics cannot be accepted as reliable; and even in those places it is chiefly since the outbreak of plague in 1898 that particular attention and scrutiny have been given to them, with special reference to the number of deaths. In other parts the *pātel* or headman has to keep up the register, under the control of the revenue officers; but as there is no obligation on householders to report domestic occurrences, he can hardly be held responsible for the accuracy of the returns. The following table is compiled from such statistics as are available, but the numbers of both births and deaths are manifestly understated:— Vital statistics.

Year.	Population under registration.	Ratio of registered births per 1,000.	Ratio of registered deaths per 1,000.	Deaths per 1,000 from			
				Cholera.	Small-pox.	Fever.	Bowel complaints.
1881 .	4,186,188	23·77	17·01	0·01	0·61	10·47	1·15
1891 .	4,843,523	19·80	14·03	0·25	1·05	7·91	1·02
1901 .	5,449,800	15·28	19·98	2·08	1·19	8·12	1·04
1904 .	5,449,800	14·05	21·83	0·09	0·23	10·64	1·12

For the decade 1892–1901, Chitaldroog and Mysore show the highest and lowest birth-rates respectively, and Shimoga and Tumkūr the highest and lowest death-rates.

There were 1,025,838 cases treated in the hospitals and dispensaries of the State in 1901, of which 46 per cent. were those of men, and the rest of women and children in the proportion of about 2 to 3. The diseases treated are classed as general or local, 42 per cent. belonging to the former class. Of these the most numerous were malarial fevers, worms, rheumatic affections, debility and anaemia, and venereal diseases. Of local, the greater number were diseases of the skin, the digestive system, the eye, the lungs, and injuries. Diseases.

Plague first appeared in August, 1898, at Bangalore, being imported by rail from Dhārwār. By the end of June, 1904, it had claimed 106,950 victims in the whole State, out of 141,403 cases of seizure. In other words, 2·5 per cent. of the population were attacked by plague, and of those attacked nearly 76 per cent. died. The figures for each year show a large decrease in 1899–1900 and a rise since. With 1903–4 the numbers are again going down. The temporary decrease in the second year was probably due to extensive exodus to other parts, a drier season owing to deficient rainfall, general inoculation, and enforcement of passport regulations. Special restrictions have since been virtually withdrawn; but evacuation of infected places, general or local disinfection by chemicals or desiccation, and the opening out of congested parts are in operation[1]. No place has suffered more than Mysore city, where 17 per cent. of the deaths have occurred. A regulation was passed in 1903 appointing a special board for the improvement of the city. Shimoga and Kadūr Districts were free till 1900, and Chitaldroog District had no deaths from plague that year. The disease seems to be at its maximum about October, and at its minimum about May, these being respectively the wettest and driest months in the year.

Infant mortality.

The figures obtained at the Census of 1901 are a gauge of the infant mortality occasioned by the famine of 1876–8, and by the unhealthy years, culminating in plague, of the decade 1891–1901. The following table gives the ratio of infants of either sex to 1,000 of the same sex:—

Age.	1881.		1891.		1901.	
0–5 .	M. 91	F. 98	M. 138	F. 147	M. 128	F. 132
5–10 .	M. 137	F. 141	M. 136	F. 141	M. 142	F. 145

Sex statistics.

The proportion of females to 1,000 males in the whole State in 1901 was 981, the figures for the urban population being 963, and for the rural 983. In 1871 the proportion was 994, in 1881 it was 1,007, and in 1891 it was 991. The relative number of females has thus fallen considerably in the thirty years. Hindus exceeded the general average at each Census. Christians had the fewest females in the three previous census years, and in 1901 this position was held by the Jains. Females exceed males in Mysore and Hassan Districts (1,020 and 1,010), and are most in defect in Shimoga and

[1] Large extensions have been added to Bangalore city, and a new town on modern lines has been laid out at the Gold Fields.

Kadūr (618 and 908). In the Civil and Military Station of Bangalore the ratio is 986, in Mysore city 984, in Bangalore city 931, and in the Kolār Gold Fields only 699, as might be expected. Since 1891 males have increased by 12·6 per cent. and females by 11·4.

The unmarried, the married, and the widowed are respectively 47·45, 40·73, and 12·20 of the population. Females include 41 per cent. of the unmarried, 51 of the married, and 79 of the widowed. Christians have the highest proportion of unmarried and the lowest of widowed in both sexes. Next come Animists and Musalmāns, with lower proportions of unmarried and higher of widowed. The Jains have a higher ratio of bachelors than the Hindus, but among them spinsters are proportionately fewest and widowers and widows most numerous. Civil condition.

Infant marriage of girls prevails most among the Jains and Hindus, and scarcely at all among Christians, but there are cases in all religions. Of 1,000 married females, 54 are under five years of age. But of course these are really cases of betrothal, though as irrevocable as marriage, and causing widowhood if death should intervene. Chitaldroog District shows the highest proportion of such cases; certain subdivisions of Wokkaligas there are said to have a custom of betrothing the children of near relations to one another within a few months of their birth, the *tāli*, or token of the marriage bond, being tied to the cradle of the infant girl. Some of the Panchāla artisans and devotee Lingāyats seem specially given to infant marriage. By a regulation of 1894 the marriage of girls under 8 has been prohibited in Mysore, and also that of girls under 14 to men of over 50. Of the total number of married females, 7·6 per cent. are under 15, and 12·3 per cent. between 15 and 20. Among Brāhmans and Komatis girls must be married before puberty, and in the majority of cases the ceremony takes place between 8 and 12. In other castes girls are mostly married between the ages of 10 and 20. Above this age there are very few spinsters, and these principally among native Christians, though among Lambānis and Iruligas, classed as Animists, brides are often over 30. Of widows, more than 73 per cent. are over 40. Roughly speaking, among Christians and Jains one widow in 3 is under 40, in the other religions one in 4. After 40 more than half the women are widows. Remarriage of widows is utterly repugnant to most Hindu castes, though permissible in some of the lower ones. It appears from the census returns that 5·8 per cent. of widows were remarried, but this was prin-

cipally among Woddas and Jogis, who are not socially very important, and among Musalmān Labbais and nomad Koramas.

Of the male sex seven youths under 15 in 1,000 are married; from 15 to 20 there are 13·3 per cent. married and 0·2 per cent. widowers; from 20 to 40 there are 69 per cent. married and 3·7 per cent. widowers; over 40 there are 78·7 per cent. married and 17·7 per cent. widowers.

Polygamy is rare, though allowed by all classes except Christians. Cast-off or widowed women of the lower orders sometimes attach themselves as concubines to men who have legitimate wives. Among the higher castes a second wife is taken only when the first proves barren, or is incurably ill, or immoral. But unless put away for immoral conduct, the first wife alone is entitled to join the husband in religious ceremonies, and the second can do so only with her consent. The proportion of married men who have more than one wife is 18 in 1,000. Animists and Musalmāns stand highest in this respect, and next, labouring and agricultural classes such as Woddas, Idigas, Wokkaligas, and Kurubas.

There are no statistics for divorce. Polyandry and infanticide are unknown in Mysore, as also inheritance through the mother. The joint family system continues among Hindus, but modern influences are tending towards breaking it up.

Language. The distinctive language of Mysore is Kannada, the Karnāta or Karnātaka of the *pandits*, and the Kanarese of European writers. It is the speech of 73 per cent. of the population, and prevails everywhere except in the east. Telugu, confined to Kolār District and some of the eastern *tāluks*, is the language of 15 per cent. Tamil (called here Arava) is the speech of 4 per cent., and predominates at the Kolār Gold Fields and among the servants of Europeans, camp-followers, and cantonment traders. A more or less corrupt Tamil is spoken by certain long-domiciled classes of Brāhmans (Srīvaishnava, Sanketi, and Brihachcharana), and by Tigala cultivators, but its use is only colloquial. Marāthī, which is spoken by 1·4 per cent. of the population, is the language of Deshasth Brāhmans and Darzis or tailors, the former being most numerous in Shimoga District. Hindustāni, the language of Musalmāns, who form 5·22 per cent. of the population, is spoken by only 4·8 per cent., the difference being due to the Labbais and other Musalmāns from the south speaking Tamil. In each of these vernaculars there has been since 1891 an increase of about 11 per cent., except in Tamil, which has

increased 42 per cent., owing to the influx of labour at the gold-mines and partly on the railways.

Race, tribe, and caste.

The Hindus have been arranged under 72 castes or classes. Of these, the strongest numerically are Wokkaligas (1,287,000), Lingāyats (671,000), and Holeyas (596,000), who between them make up 46 per cent. of the total population. The Wokkaligas (in Hindustāni, Kunbī) are the cultivators or ryots. They include numerous tribes, some of Kanarese and some of Telugu origin, who neither eat together nor intermarry. Their headmen are called Gaudas. Marriage is not always performed before puberty, and polygamy has some vogue, the industry of the women being generally profitable to the husband. Widow remarriage is allowed, but lightly esteemed. The Wokkaligas are mostly vegetarians and do not drink intoxicating liquor. They bury their dead. The Gangadikāra, who form nearly one-half of the class, are purely Kanarese, found chiefly in the central and southern parts. They represent the subjects of the ancient Gangavādi which formed the nucleus of the Ganga empire. At the present day they are followers some of Siva and some of Vishnu. Next in numbers are the Morasu Wokkaligas, chiefly in Kolār and Bangalore Districts. They appear to have been originally immigrants from a district called Morasu-nād, to the east of Mysore, whose chiefs formed settlements at the end of the fourteenth century in the parts round Nandidroog. The section called Beralukoduva (finger-giving) had a strange custom, which, on account of its cruelty, was put a stop to by Government. Every woman of the sect, before piercing the ears of her eldest daughter preparatory to betrothal, had to suffer amputation of the ring and little fingers of the right hand, the operation being performed by the village blacksmith with a chisel. The sacred place of the Morasu Wokkaligas is Sīti-betta in the Kolār *tāluk*, where there is a temple of Bhairava. Of other large tribes of Wokkaligas, the Sāda abound mostly in the north and west. They include Jains and Lingāyats, Vaishnavas and Saivas. Not improbably they all belonged to the first originally. In the old days many of them acted in the Kandāchār or native militia. They are not only cultivators but sometimes trade in grain. The Reddi are found chiefly in the east and north, and have numerous subdivisions. To some extent they seem to be of Telugu origin, and have been supposed to represent the subjects of the ancient Rattavādi, or kingdom of the Rattas. The Nonabas, in like manner, are relics of the ancient Nolambavādi or Nonambavādi, a Pallava province, situated in Chitaldroog

Wokkaligas.

District. At the present day they are by faith Lingāyats, the residence of their chief *gurū* being at Gaudikere near Chiknāyakanhalli. The acknowledged head of the Nonabas lives at Hosahalli near Gubbi. The Halepaiks of the Nagar Malnād are of special interest as being probably aboriginal. Their name is said to mean the 'old foot,' as they furnished the foot-soldiers and body-guards of former rulers, to whom they were noted for their fidelity. Their principal occupation now is the extraction of toddy from the *bagni*-palm (*Caryota urens*), the cultivation of rice land, and of *kāns* or woods containing pepper vines; but they are described as still fond of firearms, brave, and great sportsmen. In Vastāra and Tuluva (South Kanara) they are called Billavas or 'bowmen.' In Manjarābād they are called Devara makkalu, 'God's children.' The Hālu Wokkaligas are mostly in Kadūr and Hassan Districts. They are dairymen and sell milk (*hālu*), whence their name, as well as engage in agriculture. The Hallikāra are also largely occupied with cattle, the breed of their name being the best in the Amrit Mahāl. The Lālgonda, chiefly found in Bangalore District, not only farm, but hire out bullocks, or are gardeners, builders of mud walls, and traders in straw, &c. The Vellāla are the most numerous class of Wokkaligas in the Civil and Military Station of Bangalore. Another large class, as numerous as the Reddi, are the Kunchitiga, widely spread but mostly found in the central parts. The women prepare and sell *dāl* (pigeon pea), while the men engage in a variety of trades.

Holeyas. The Holeyas (Tamil, Paraiya; Marāthī, Dhed) are outcastes, occupying a quarter of their own, called the Holageri, outside every village boundary hedge. They are indigenous and probably aboriginal. They have numerous subdivisions, which eat together but only intermarry between known families. A council of elders decides all questions of tribal discipline. They are regarded as unclean by the four principal castes, and particularly by the Brāhmans. In rural parts especially, a Holeya, having anything to deliver to a Brāhman, places it on the ground and retires to a distance, and on meeting a Brāhman in the road endeavours to get away as far as possible. Brāhmans and Holeyas mutually avoid passing through the parts they respectively occupy in the villages; and a wilful transgression in this respect, if it did not create a riot, would make purification necessary, and that for both sides. They often take the vow to become Dāsari, and regard the Sātāni as priests, but a Holeya is himself generally the priest of the village goddess. Under the name of Tirukula, the

Holeyas have the privilege of entering the great temple at Melukote once a year to pay their devotions, said to be a reward for assisting Rāmānuja to recover the image of Krishna which had been carried off to Delhi by the Musalmāns. The Holeya marriage rite is merely a feast, at which the bridegroom ties a token round the bride's neck. A wife cannot be divorced except for adultery. Widows may not remarry, but often live with another man. The Holeyas eat flesh and fish of all kinds, and even carrion, provided the animal died a natural death, and drink spirituous liquors. As a body the Holeyas are the servants of the ryots, and are mainly engaged in following the plough and watching the herds. They also make certain kinds of coarse cloth, worn by the poorer classes. The Alemān section furnishes recruits for the Barr sepoy regiments. In the Maidān a Holeya is the *kulavādi*, and has a recognized place in the village corporation. He is the village policeman, the beadle, and the headman's factotum. The *kulavādis* are the ultimate referees in cases of boundary disputes, and if they agree no one can challenge the decision. In the Malnād the Holeya was merely a slave, of which there were two classes: the *huttāl*, or slave born in the house, the hereditary serf of the family; and the *mannāl*, or slave of the soil, who was bought and sold with the land. Now these have of course been emancipated, and some are becoming owners of land. In urban centres they are rising in respectability and acquiring wealth, so that in certain cases their social disabilities are being overcome, and in public matters especially their complete ostracism cannot be maintained.

Ten other castes, each above 100,000, make up between them 30 per cent. of the population. They are the Kuruba (378,000), Mādiga (280,000), Beda or Bedar (245,000), Brāhman (190,000), Besta (153,000), Golla (143,000), Wodda (135,000), Banajiga (123,000), Panchāla (126,000), and Uppāra (106,000). The Kurubas are shepherds and weavers of native Kurubas. blankets (*kambli*). There is no intercourse between the general body and the division called Hande Kurubas. The former worship Bīre Deva and are Saivas, their priests being Brāhmans and Jogis. The caste also worship a box, which they believe contains the wearing apparel of Krishna, under the name of Junjappa. Parts of Chitaldroog and the town of Kolār are noted for the manufacture by the Kurubas there of a superior woollen of fine texture like homespun. The women spin wool, and as they are very industrious, polygamy prevails, and even adultery is often condoned, their labour

being a source of profit. The wild or Kādu Kurubas (8,842) are subdivided into Betta or 'hill,' and Jenu or 'honey,' Kurubas. The former are a small and active race, expert woodmen, and capable of enduring great fatigue. The latter are a darker and inferior race, who collect honey and bees-wax. Their villages or clusters of huts are called *hadi*; and a separate hut is set apart at one end for the unmarried females to sleep in at night, and one at the other end for the unmarried males, both being under the supervision of the headman. Girls are married only after puberty, either according to the Wokkaliga custom, or by a mere formal exchange of areca-nut and betel-leaf. Polygamy exists, but the offspring of concubines are not considered legitimate. All kinds of meat except beef are eaten, but intoxicating drinks are not used. In case of death, adults are cremated and children buried. The Betta Kurubas worship forest deities called Norāle and Māstamma, and are said to be revengeful, but if treated kindly will do willing service. The Jenu Kurubas neither own nor cultivate land for themselves, nor keep live-stock of their own. Both classes are expert in tracking wild animals, as well as skilful in eluding pursuit by wild animals accidentally encountered. Their children when over two years old move about freely in the jungle.

Mādigas. The Mādigas are similar to the Holeyas, but distinguished from them by being workers in leather. They remove the carcases of dead cattle, and dress the hides to provide the villagers with leathern articles, such as the thongs for bullock yokes, buckets for raising water, &c. They are largely engaged in field labour, and in urban centres are earning much money, owing to the increasing demand for hides and their work as tanners. They worship Vishnu, Siva, and their female counterparts or Saktis, and have five different *gurūs* or *maths* in the State. They have a division called Desabhāga, who do not intermarry with the others. They acknowledge Srīvaishnava Brāhmans as their *gurūs*, and have also the names Jāmbavakula and Mātanga. They are privileged to enter the courtyard of the Belūr temple at certain times to present the god with a pair of slippers, which it is the duty of those in Channagiri and Basavāpatna to provide. Their customs are much the same as those of the Holeyas.

Bedas. The Bedas (Bedars), or Naiks, are both Kanarese and Telugu, the two sections neither eating together nor intermarrying. One-third are in Chitaldroog District, and most of the rest in Kolār and Tumkūr. They were formerly hunters and soldiers by profession, and largely

composed Haidar's and Tipū's infantry. Many of the Mysore *poligārs* were of this caste. They now engage in agriculture, and serve as police and revenue peons. They claim descent from Vālmiki, author of the Rāmāyana, and are chiefly Vaishnavas, but worship all the Hindu deities. In some parts they erect a circular hut for a temple, with a stake in the middle, which is the god. In common with the Golla, Kuruba, Mādiga, and other classes, they often dedicate the eldest daughter in a family in which no son is born as a Basavi or prostitute; and a girl falling ill is similarly vowed to be left unmarried, i.e. to the same fate. If she bear a son, he is affiliated to her father's family. Except as regards beef, they are not restricted in food or drink. Polygamy is not uncommon, but divorce can be resorted to only in case of adultery. Widows may not remarry, but often live with another Beda. The dead are buried. The caste often take the vow to become Dāsari. Their chief deity is the god Venkataramana of Tirupati, locally worshipped under the name Tirumala, but offerings and sacrifices are also made to Māriamma. Their *gurū* is known as Tirumala Tātāchārya, a head of the Srīvaishnava Brāhmans. The Māchi or Myāsa branch, also called Chuñchu, circumcise their boys at ten or twelve years of age, besides initiating them with Hindu rites. They eschew all strong drink, and will not even touch the date-palm from which it is extracted. They eat beef, but of birds only partridge and quail. Women in childbirth are segregated. The dead are cremated, and their ashes scattered on *tangadi* bushes (*Cassia auriculata*). This singular confusion of customs may perhaps be due to the forced conversion of large numbers to Islām in the time of Haidar to form his Chela battalions. The Telugu Bedas are called Boya. One section, who are *shikāris*, and live on game and forest produce, are called Myāsa or Vyādha. The others are settled in villages, and live by fishing and day labour. The latter employ Brāhmans and Jangamas as priests, but the former call in elders of their own caste. The Myāsa women may not wear toe-rings, and the men may not sit on date mats.

Bestas are fishermen, boatmen, and palanquin-bearers. This is their name in the east; in the south they are called Toreya, Ambiga, and Parivāra; in the west Kabyara and Gangemakkalu. Those who speak Telugu call themselves Bhoyi, and have a headman called Pedda Bhoyi. One section are lime-burners. Some are peons, and a large number engage in agriculture. Their domestic customs are similar to those of Bestas.

the castes above mentioned. Their goddess is Yellamma, and they are mostly worshippers of Siva. They employ Brāhmans and Sātānis for domestic ceremonies. The Gollas are

Gollas. cowherds and dairymen. The Kādu or 'forest' Gollas are distinct from the Uru or 'town' Gollas, and the two neither eat together nor intermarry. One section was formerly largely employed in transporting money from one part of the country to another, and gained the name Dhanapāla. One of the servants in Government treasuries is still called the Golla. They worship Krishna as having been born in their caste. The Kādu Gollas are nomadic, and live in thatched huts outside the villages. At childbirth the mother and babe are kept in a small hut apart from the others for from seven to thirty days. If ill, none of her caste will attend on her, but a Naik or Beda woman is engaged to do so. Marriages are likewise performed in a temporary shed outside the village, to which the wedded pair return only after five days of festivity. Golla women do not wear the bodice, nor in widowhood do they break off their glass bangles. Remarriage of widows is not allowed.

Woddas. The Woddas are composed of Kallu Woddas and Mannu Woddas, between whom there is no social intercourse or intermarriage. The Kallu Woddas, who consider themselves superior to the others, are stonemasons, quarrying, transporting, and building with stone, and are very dexterous in moving large masses by simple mechanical means. The Mannu Woddas are chiefly tank-diggers, well-sinkers, and generally skilful navvies for all kinds of earthwork, the men digging and the women removing the earth. Though a hard-working class, they have the reputation of assisting dacoits and burglars by giving information as to plunder. The young and robust of the Mannu Woddas of both sexes travel about in caravans in search of employment, taking with them their infants and huts, which consist of a few sticks and mats. On obtaining any large earthwork, they form an encampment in the neighbourhood. The older members settle in the outskirts of towns, where many of both sexes now find employment in various kinds of sanitary work. They were probably immigrants from Orissa and the Telugu country, and generally speak Telugu. They eat meat and drink spirits, and are given to polygamy. Widows and divorced women can remarry. Both classes worship all the Hindu deities, but chiefly Vishnu.

Banajigas. The Banajigas are the great trading class. The subdivisions are numerous, but there are three main branches, the Pan-

chama, Telugu, and Jain Banajigas, who neither eat together nor intermarry. The first are Lingāyats, having their own priests, who officiate at marriages and funerals, and punish breaches of caste discipline. Telugu Banajigas are very numerous. The Saivas and Vaishnavas among them do not intermix socially. The latter acknowledge the *gurū* of the Srī-vaishnava Brāhmans. They frequently take the vow to become Dāsari. Many dancing-girls are of this caste. The Panchāla, as their name implies, embrace five guilds of artisans: namely, goldsmiths, brass and coppersmiths, blacksmiths, carpenters, and sculptors. They wear the triple cord and consider themselves equal to the Brāhmans, who, however, deny their pretensions. The goldsmiths are the recognized heads of the clan. The Panchāla have a *gurū* of their own caste, though Brāhmans officiate as *purohits*. The Uppāra are saltmakers. This is their name in the east; in the south they are called Uppaliga, and in the west Melusakkare. There are two classes, Kannada and Telugu. The former make earth-salt, while the latter are bricklayers and builders. They are worshippers of Vishnu and Dharma Rāya.

Panchāla.

Uppāra.

Right-hand and left-hand castes.

The agricultural, artisan, and trading communities form a species of guilds, called *phana* (apparently a very ancient institution), and these are divided into two factions, termed Balagai (right-hand) and Yedagai (left-hand). The former contains 18 *phana*, headed by the Banajiga and Wokkaliga, with the Holeya at the bottom; while the latter contains 9 *phana*, with the Panchāla and Nagarta (traders) at the head, and the Mādiga at the bottom. Brāhmans, Kshattriyas, and most of the Sūdras are considered to be neutral. Each party insists on the exclusive right to certain privileges on all public festivals and ceremonies, which are jealously guarded. A breach on either side leads to faction fights, which formerly were of a furious and sometimes sanguinary character. Thus, the right-hand claim the exclusive privilege of having 12 pillars to the marriage *pandal*, the left-hand being restricted to 11; of riding on horseback in processions, and of carrying a flag painted with the figure of Hanumān. In the Census of 1891 the people by common consent repudiated the names Balagai and Yedagai, and preferred to return themselves as of the 18 *phana* or the 9 *phana*. In the Census of 1901 even this distinction was ignored, and the people returned themselves in various irreconcilable ways, mostly as belonging to 12 *phana*. The old animosity of the factions seems to be wearing away.

Nomad tribes. Lambānis.

Of nomad tribes, more than half are Lambānis and another fourth are Koracha, Korama, or Korava. The first are a gipsy tribe that wander about in gangs with large herds of bullocks, transporting grain and other produce, especially in the hilly and forest tracts. Of late years some have been employed on coffee estates, and some have even partially abandoned their vagrant life, and settled, at least for a time, in villages of their own. These, called *tāndas*, are composed of groups of their usual rude wicker huts, pitched on waste ground in wild places. The women bring in bundles of firewood from the jungles for sale in the towns. The Lambānis speak a mixed dialect called Kutni, largely composed of Hindī and Marāthī corruptions. The women are distinguished by a picturesque dress different from that worn by any other class. It consists of a sort of tartan petticoat, with a stomacher over the bosom, and an embroidered mantle covering the head and upper part of the body. The hair is worn in ringlets or plaits, hanging down each side of the face, decorated with small shells, and ending in tassels. The arms and ankles are profusely covered with trinkets made of bone, brass, and other rude materials. The men wear tight cotton breeches, reaching a little below the knee, with a waistband ending in red silk tassels, and on the head a small red or white turban. There is a class of Lambāni outcastes, called Dhālya, who are drummers and live separately. They chiefly trade in bullocks. The Lambānis hold Gosains as their *gurūs*, and reverence Krishna; also Basava, as representing the cattle that Krishna tended. But their chief object of worship is Banashankari, the goddess of forests. Their marriage rite consists of mutual gifts and a tipsy feast. The bridal pair also pour milk down an ant-hill occupied by a snake, and make offerings to it of coco-nuts and flowers. Polygamy is in vogue, and widows and divorced women may remarry, but with some disabilities. The Lambānis are also called Sukāli and Brinjāri.

Koravas.

The Koracha, Korama, or Korava are a numerous wandering tribe, who carry salt and grain from one market to another by means of large droves of cattle and asses, and also make bamboo mats and baskets. The men wear their hair gathered up into a big knot or bunch on one side of the top of the head, resembling what is seen on ancient sculptured stones. The women may be known by numerous strings of small red and white glass beads and shells, worn round the neck and falling over the bosom. In the depths of the forest they are even said to dispense with more substantial covering. A custom like *couvade* is said to linger among the

Korava, but this is not certain. The dead are buried at night in out-of-the-way spots. The women are skilful in tattooing. The Iruliga are the remaining wild tribe, and include the Sholaga, who live in the south-east in the Biligiri-rangan hills. They are very dark, and are keen-sighted and skilful in tracking game. They cultivate small patches of jungle clearings with the hoe, on the *kumri* or shifting system. Polygamy is the rule among them, and adultery is unknown. When a girl consents to marriage, the man runs away with her to some other place till the honeymoon is over, when they return home and give a feast. They live in bamboo huts thatched with plantain leaves. Iruligas.

The percentage of the followers of each religion to the whole population in the Census of 1901 was, in order of strength: Hindus, 92·1; Musalmāns, 5·2; Animists, 1·6; Christians, 0·9; Jains, 0·2. There remained 158 persons who were Pārsīs, Sikhs, Jews, Brahmos, or Buddhists; 101 were Pārsīs and 34 Jews. The percentage of increase in each since 1891 was: Christians, 31·3; Musalmāns, 14·5; Hindus, 11·5; Jains, 3. Religion and sect.

Of Hindu religious sects in Mysore, Lingāyats are by far the strongest in numbers; and if, in addition to those returned as such, the Nonaba, Banajiga, and others belonging to the sect be taken into account, they cannot be much below 800,000. Their own name for themselves is Sivabhakta or Sivāchār, and Vīra Saiva. Their distinctive mark is the wearing of a *jangama* (or portable) *lingam* on the person, hence the name Lingāyata or Lingavanta. The *lingam* is a small stone, about the size of an acorn, enshrined in a silver casket of peculiar shape, worn suspended from the neck or bound to the arm. They also mark the forehead with a round white spot. The clerics smear their faces and bodies with ashes, and wear garments of the colour of red ochre, with a rosary of *rudrāksha* beads round the neck. Lingāyats.

Phallic worship is no doubt one of the most ancient and widely diffused forms of religion in the world, and the Lingāyats of late have made doubtful pretensions to date as far back as the time of Buddha. Among the Saiva sects mentioned by the reformer Sankarāchārya as existing in India in the eighth century were the Jangamas, who he says wore the trident on the head and carried a *lingam* made of stone on their persons, and whom he denounces as unorthodox. Of this sect the Lingāyats claim to be the representatives. Whether this be so or not, it is undoubted that the Lingāyat faith has been the

popular creed of the Kanarese-speaking countries from the twelfth century.

Lingāyats reject the authority of the Brāhmans and the inspiration of the Vedas, and deny the efficacy of sacrifices and *srāddhas*. They profess the Saiva faith in its idealistic form, accepting as their principal authority a Saiva commentary on the Vedānta Sūtras. They contend that the goal of *karma* or performance of ceremonies is twofold—the attainment of *svarga* or eternal heavenly bliss, and the attainment of *jnāna* or heavenly wisdom. The former is the aim of Brāhman observances; the latter, resulting in union with the deity, is the *summum bonum* of the Lingāyats.

The Lingāyat sect in its present form dates from about 1160, a little more than forty years after the establishment of the Vaishnava faith and the ousting of the Jains in Mysore by Rāmānujāchārya. Its institution is attributed to Basava, prime minister of the Kalachuri king Bijjala, who succeeded the Chālukyas and ruled at Kalyāni (in the Nizām's Dominions) from 1155 to 1167. Basava (a vernacular form of the Sanskrit *vrishabha*, 'bull') was supposed to be an incarnation of Siva's bull Nandi, sent to the earth to revive the Saiva religion. He was the son of an Arādhya Brāhman, a native of Bāgevādi in Bijāpur District. He refused to be invested with the sacred thread, or to acknowledge any *gurū* but Siva, and incurred the hostility of the Brāhmans. He retired for some time to Sangamesvara, where he was instructed in the tenets of the Vīra Saiva faith. Eventually he went to Kalyāni, where the king Bijjala, who was a Jain, married his beautiful sister and made him prime minister. This position of influence enabled him to propagate his religious system. Meanwhile, a sister who was one of his first disciples had given birth to Channa Basava, supposed to be an incarnation of Siva's son Shanmukha, and he and his uncle are regarded as joint founders of the sect. The Basava Purāna and Channa Basava Purāna, written in Hala Kannada, though not of the oldest form, containing miraculous stories of Saiva *gurūs* and saints, are among their chief sacred books. Basava's liberal use of the public funds for the support of Jangama priests aroused the king's suspicions, and he thoughtlessly ordered two pious Lingāyats to be blinded, which led to his own assassination. Basava and Channa Basava fled from the vengeance of his son, and are said to have been absorbed into the god. The reformed faith spread rapidly, superseding that of the Jains; and according to tradition, within sixty years of Basava's

death, or by 1228, it was embraced from Ulavi, near Goa, to Sholāpur, and from Bālehalli (in Kadūr District) to Sivaganga (Bangalore District). It was a State religion of Mysore from 1350 to 1610, and especially of the Keladi, Ikkeri, or Bednūr kingdom from 1550 to 1763, as well as of various neighbouring principalities. Since the decline of the Jains, the Lingāyats have been preservers and cultivators of the Kanarese language.

The sect was originally recruited from all castes, and observances of caste, pilgrimage, fasts, and penance were rejected. Basava taught that all holiness consisted in regard for three things, *gurū*, *lingam*, and *jangam*—the guide, the image, and the fellow religionist. But caste distinctions are maintained in regard to social matters, such as intermarriage. The *lingam* is tied to an infant at birth, must always be worn to the end of life, and is buried with the dead body. At a reasonable age the child is initiated by the *gurū* into the doctrines of the faith. All are rigid vegetarians. Girls are married before puberty. Widows do not marry again. The dead are buried. The daily ritual consists of Saiva rites, and it may be stated that *lingam* worship, in both act and symbol, is absolutely free from anything indecorous. Five spiritual thrones or *simhāsanas* were originally established: namely, at Bālehalli (Kadūr District), Ujjain, Kāsī (Benares), Srīsailam (Kurnool District), and Kedārnāth (in the Himālayas). *Maths* still exist in these places and exercise jurisdiction over their respective spheres.

The Lingāyats are a peaceful and intelligent community, chiefly engaged in trade and agriculture. In commerce they occupy a very prominent place, and many are now taking advantage of the facilities for higher education and qualifying for the professions.

Brāhmans.

The Brāhmans (190,050) are divided among four sects: namely, Smārtas, who form 63 per cent.; Mādhvas, 23 per cent.; Srīvaishnavas, 10 per cent.; and Bhāgavatas, 4 per cent. Smārtas are followers of the *smriti*, and hold the Advaita doctrine. Their chief deity is Siva, and the sect was founded by Sankarāchārya in the eighth century. Their *gurū* is the head of the *math* established by him at Sringeri (Kadūr District), who is styled the Jagad Gurū. They are distinguished by three parallel horizontal lines of sandal paste or cow-dung ashes on the forehead, with a round red spot in the centre. The Mādhvas are named after their founder Madhvāchārya, who lived in South Kanara in the thirteenth century. They specially worship Vishnu, and hold the Dvaita doctrine. Their *gurūs* are at Nanjangūd, Hole-Narsipur, and Sosile. They wear

a black perpendicular line from the junction of the eyebrows to the top of the forehead, with a dot in the centre. The Srīvaishnavas worship Vishnu as identified with his consort Srī, and hold the Visishtādvaita doctrine. The sect was founded by Rāmānujāchārya early in the twelfth century. There are two branches: the Vadagalai ('northerners'), who form two-thirds, and adhere to the sacred texts in Sanskrit; and the Tengalai ('southerners'), who form one-third, and have their sacred texts in Tamil. Their mark is a trident on the forehead, the centre line being yellow or red and the two outer ones white. The Tengalai continue the central line of the trident in white for some distance down the nose. The Bhāgavatas are probably a very ancient sect. They are classed with Smārtas, but chiefly worship Vishnu, and wear Vaishnava perpendicular marks. Nearly all the Brāhmans in Mysore belong to the Pancha Drāvida or 'five tribes of the south.'

Sātāni.

The Sātāni (22,378) are the next most numerous religious sect. They are regarded as priests by the Holeya and other inferior castes, and themselves have the chiefs of the Srīvaishnava Brāhmans and Sannyāsis as their *gurūs*. They are votaries of Vishnu, especially in the form of Krishna, and are followers of Chaitanya. As a rule they are engaged in the service of Vaishnava temples, and are flower-gatherers, torch-bearers, and strolling musicians. They call themselves Vaishnavas, the Baisnabs of Bengal.

Musalmāns.

Of Musalmāns the majority are Sunnis, very few being Shiahs. There are thirteen Musalmān classes, the most numerous of which are Shaikh (178,625), Saiyid (42,468), Pathān (41,156), Mughal (8,241), Labbai (6,908), and Pinjari (4,558). The first four are mostly in the army, police, and other Government service, but many are merchants and traders. The Labbai are descendants of Arabs and women of the country. They come from Negapatam and other parts of the Coromandel coast, and speak Tamil. They are an enterprising class of traders, settled in most of the towns, vendors of hardware and other articles, collectors of hides, and traders in coffee. But they take up any lucrative business. Some are settled as agriculturists at Gargeswari in Mysore District. The Māppilla or Moplah are of similar origin but from the Malabar coast, and speak Malayālam. They are principally on the coffee plantations in the west. At one time there were many at the Kolār gold-mines. The Pinjari are cotton-ginners and cleaners; other Musalmāns as a rule have no intercourse with them. At Channapatna and one or two other places is a sect called

Daire, who came originally from Hyderābād. They believe the Mahdi to have come and gone, and do not intermarry with other Musalmāns. They trade in silk with the west coast.

Christians at the Census of 1901 numbered 50,059: namely, Europeans, 4,753; Eurasians, 5,721; and native Christians, 39,585. The first two classes are mostly in Bangalore and the Kolār Gold Fields, but they are also scattered in various parts of the country. European coffee-planters reside in Kadūr and Hassan Districts. The principal Eurasian rural settlement is Whitefield in Bangalore District. The same District and the Kolār Gold Fields contain the largest number of native Christians. They have increased 41·6 per cent. since 1891, or, excluding the Civil and Military Station of Bangalore, 62·8 per cent. The following were the principal denominations returned:— Christians.

Denomination.	Europeans.	Eurasians.	Natives.	Total.
Roman Catholic . .	1,095	2,834	33,687	37,616
Anglican	2,911	2,280	2,606	7,797
Methodist	437	391	1,816	2,644

The Roman Catholics increased by 29 per cent. in the decade. As regards the Anglicans and Methodists, it appears that some belonging to the latter denomination entered themselves merely as Protestants, and were thereby included among the former. Putting both together, to rectify the error in some degree, the increase was 25·3 per cent. The Methodists include Wesleyans and American Methodist Episcopalians. The Roman Catholic diocese of Mysore extends over Mysore, Coorg, Wynaad, Hosūr, and Kollegāl. The Bishop resides at Bangalore. The Anglican churches are in the diocese of the Bishop of Madras.

Of Christian missions to Mysore, the oldest by far was the Roman Catholic. So far back as 1325 the Dominicans are said to have commenced work in the Hoysala kingdom. In 1400 they built a church at Anekal[1]. The Vijayanagar Dīwān in 1445 is said to have been a Christian, and also the viceroy at Seringapatam in 1520. In 1587 the Franciscans arrived on the scene. But it was not till the middle of the seventeenth century that mission work was firmly established. At that period some Jesuit priests from Coimbatore founded the Kanarese mission at Satyamangalam, Seringapatam, and other Christian missions. Roman Catholics.

[1] An old inscription, surmounted by a cross, has been found there relating to the *kumbāra ane* or potters' dam.

places in the south. In 1702 two French Jesuits from Vellore founded a Telugu mission in the east, building chapels at Bangalore, Devanhalli, Chik-Ballāpur, and other places. The suppression of the Jesuit Order in 1773 was a severe check: and in the time of Tipū all the churches and chapels were razed to the ground, except one at Grāma near Hassan, and one at Seringapatam, the former being preserved by a Muhammadan officer, and the latter defended by the native Christian troops under their commander. After the fall of Seringapatam in 1799, the work was taken up by the Foreign Missions Society of Paris, and the Abbé Dubois, who was in the south, was invited to Seringapatam by the Roman Catholics. He laboured in Mysore for twenty-two years, adopting the native dress and mode of living. He was highly respected by the people, who treated him as a Brāhman, and he became well known from his work on *The People of India*, the manuscript of which was bought by the British Government [1]. He was the founder of the church at Mysore, and of the Christian agricultural community of Sathalli near Hassan, and is said to have introduced vaccination into the State. The East India Company gave him a pension, and he died in France in 1848 at the age of eighty-three. In 1846 a Vicar Apostolic was appointed, and in 1887 Mysore was made a Bishopric. The Roman Catholics have 98 places of worship in the State. At Bangalore they maintain a high-grade college and college classes for girls, a convent with schools, a well-equipped hospital, orphanages and Magdalen asylum, and a Home for the Aged under the Little Sisters of the Poor; and at Mysore there are a convent and various schools. Agricultural farms for famine orphans have been formed in the *tāluks* bordering on Bangalore.

Protestants.

Of Protestant missions the first to the Kanarese people was that at Bellary established by the London Missionary Society, which in 1820 was extended to Bangalore. The first dictionaries of the language, and the first translation of the Bible into the vernacular, together with the first casting of Kanarese type for their publication, were the work of this mission. They were also the pioneers of native female education, in 1840. They have Kanarese and Tamil churches in Bangalore, a high school, and various schools for girls. The out-stations are to the east and north of Bangalore, the chief being at Chik-Ballāpur. The Wesleyan Mission began work in 1822, but only in Tamil, in the cantonment of Bangalore. Their

[1] The best and most authentic edition of this work was published at Oxford in 1897, edited by the late H. K. Beauchamp.

Kanarese mission was commenced in 1835. In 1848 a great impetus was given to the publication of vernacular literature by their establishment of a printing press at Bangalore, and the vast improvements introduced in Kanarese type. The mission has now about forty circuits in Bangalore, Mysore, and the principal towns, with high schools at those cities, and numerous vernacular schools all over the country, besides hospitals for women and children at Mysore and Hassan. They also have some industrial schools, and issue a Kanarese newspaper and magazine. The Church of England has a native S.P.G. Mission at Bangalore, taken over in 1826 from the Danish Lutherans, by whom it had been begun a few years earlier; and the Zanāna Mission of the Church has a large Gosha hospital (for high-caste women) there, with a branch hospital at Channapatna, and a station at Mysore. The American Methodist Episcopal Church began work in 1880, and has places of worship and schools in Bangalore, chiefly for Eurasians, and a native industrial school at Kolār. A Leipzig Lutheran Mission was established at Bangalore on a small scale in 1873; and there is a small Faith Mission at Malavalli in Mysore District.

Occupation. The occupations of the people have been returned under eight main classes. Of these the most important are: pasture and agriculture, which support 68 per cent. of the population; preparation and supply of material substances, 11 per cent.; and unskilled labour not agricultural, 9 per cent. Actual workers number 1,875,371 (males 1,485,313, females 390,058), and dependents 3,664,028 (males 1,311,711, females 2,352,317).

Food. *Rāgi* (*Eleusine coracana*) is the staple food of all the lower orders and labouring classes. The flour is made into a kind of pudding called *hittu*, and into cakes, which are fried in oil. Of other millets, *jola* (*Sorghum vulgare*) is the most commonly eaten, especially in the north. Puddings and cakes are made of the flour, and it is also boiled whole to eat with curry. Of pulses, *avare* (*Dolichos Lablab*) is the favourite, and is used in curries. Rice (*Oryza sativa*) of many varieties is the principal food of Brāhmans and the higher classes.

Dress. White or coloured cotton stuffs of stout texture supply the principal dress of the people, with a woollen *kambli* or blanket as an outer covering for the night or a protection against cold or damp. Brāhmans go bare-headed, the head being shaved all except the tuft at the crown, and most Hindus observe the same practice. The moustache is the only hair worn on the face. The *dhotra*, a thin sheet, covers the lower limbs, one end being

gathered into folds in front and the other passed between the legs and tucked in at the waist behind. A similar garment is thrown over the shoulders. A bright magenta worsted cap and a scarlet, green, or blue blanket are often worn in the early morning or on a journey. At office, Brāhmans wear a turban and a long coat, either woollen or cotton. Students wear a sort of smoking-cap instead of a turban. The ryots are generally content with a turban and a *kambli*, with commonly a short pair of drawers. When not at work they often wear a blouse or short smock-frock.

The dress of the women is graceful and becoming. A tight-fitting short bodice is universally worn, leaving the arms, neck, throat, and middle bare, the two ends being tied in a knot in front. It is generally of a gay colour, or variegated with borders and gussets of contrasting tints, which set off the figure to advantage. In the colder parts, to the west, a somewhat loose jacket, covering all the upper part of the body and the arms, is worn instead. The *shīre* or *sārī*, a long sheet, ordinarily dark blue or a dull red with yellow borders, is wrapped round the lower part of the body, coming down to the ankles. One end is gathered into a large bunch of folds in front, while the other, passed across the bosom and over the head, hangs freely over the right shoulder. In the west it is tied there in a knot. Brāhman women pass the lower end of the cloth between the legs and tuck it in at the waist behind, which leaves the limbs more free. Their heads too are not covered, the hair being gathered into one large plait, which hangs straight down the back, very effectively decorated at the crown and at different points with richly chased circular golden cauls or bosses. Vaisya women are similarly dressed, but often with less good taste. They smear themselves with saffron to produce a fair or yellow tint, and not only on their cheeks but also over their arms and legs. This practice, so common among the trading class, is by no means attractive, nor is the habit of blackening the teeth, adopted by married women, more pleasing to European ideas. Many fair women are elaborately tattooed on the arms. Sūdra women generally gather the hair into a chignon or bunch behind, stuffed out with a bunch of wool, and run a large pin through, with an ornamental silver head, which is rather becoming. In the Malnād the women often arrange the back hair in a very picturesque manner, with a plait of the cream-white *ketaki* flower (*Pandanus odoratissimus*), or with orchid blossoms or pink cluster-roses. Ornaments are commonly worn by all

classes in the ears and nose, and on the arms, with rings on the fingers and toes, and as many and costly necklets and chains round the neck as means will allow. Chains frequently connect the upper rim of the ear with the ornamental pin in the back hair, and have a pretty effect. The richer Brāhman and other girls wear silver anklets, often of a very ponderous make, which are by no means elegant. A silver zone clasped in front is a common article of attire among all but the poorer women, and gives a pleasing finish to the costume. The only marked difference is in the dress of Lambāni women, already described in treating of them.

In Manjarābād the dress of the headmen is usually a black *kambli* or blanket, passed round the body and fastened over the left shoulder, leaving the right arm free. The waist is girded with a similar article, or with a cloth, generally dark blue with a white stripe. The turbans are mostly white, or dark blue with a narrow gold edging. The labourers have a similar dress of coarser material, and usually wear a leather skull-cap. All classes carry a big knife, fastened to the girdle behind.

The dress of Muhammadan males differs from that of the Hindus chiefly in cut and colour, and in the wearing of long loose drawers. But for undress a piece of dark plaided stuff is worn like the *dhotra*. They shave the head completely, but retain all the hair of the face. A skull-cap is worn, over which the turban is tied in full dress. The women wear a coloured petticoat and bodice, with a large white sheet enveloping the head and the whole person, and pulled also over the face.

The higher caste Hindus wear leathern slippers, curled up at the toe and turned down at the heel; the labouring classes wear heavy sandals, with wooden or leathern soles and leathern straps. Muhammadans also wear the slipper, but smaller, and frequently a very substantial big shoe, covering the whole foot. Women are never shod, except occasionally on a journey, or in very stony places, when they sometimes wear sandals.

Religious mendicants appear in a variety of grotesque and harlequin costumes, with hair unshorn. But garments dyed with red ochre or saffron are the commonest indications of a sacred calling.

Dwellings.

The dwellings of the people are generally of mud, one-storeyed and low, with few, if any, openings outwards except the door, but possessed of courtyards within, surrounded with

verandas and open to the sky. In the better class of houses these are well paved and drained, while the wooden pillars are elaborately carved or painted. The huts of the out-caste and poorer classes are thatched; but the houses of the higher orders are covered with either terraced or tiled roofs, the latter more especially in the west, where the rainfall is heavy.

Amusements and festivals.

Animal fights, between rams, cocks, and quails, are popular. Companies of tumblers, jugglers, snake charmers, &c., wander about and make a living. Theatrical performances are also well patronized. In the south they take place in the open at a certain season in all the large villages, the performers being the villagers themselves. The Hindu festivals most generally observed by all sects are the Holī and the Dasara, which respectively mark the seasons of the vernal and autumnal equinox; the Pongal, at the time of the winter solstice, a sort of harvest festival; the Dīpāvali or feast of lights; and the Yugādi or new year's day. The Sivarātri, or watch-night of fasting, is kept by all adherents of Siva. The Muhammadans keep the Ramzān, when thirty days of abstinence are observed, and also the Muharram, properly a season of lamentation, but generally kept here as a festival. Their principal other public feasts are the Bakr-īd and Shab-i-barāt.

Names and titles.

Among respectable Hindus a man generally has three names—the first being that of his village or the place of origin of his family; the second his personal name; and the third that of his caste or sect. It is a common custom to name the eldest son after his paternal grandfather, and the next after his maternal grandfather, but only if they are dead. If they are living, then after the great-uncle or other corresponding near relative who is dead. Girls are similarly named after the female grandparents, &c. But if a child was born in response to a religious vow, it is named after the god who is supposed to have granted it. Muhammadans are named after the apostle under whose star they are born, or from one of the ninety-nine sacred names, to which is added the sect. Girls are named after the wives or female relatives of the apostles.

Agriculture.

Agriculture is chiefly dependent on the rains. If they are sufficient and seasonable, it prospers; but such a favourable conjunction is only occasional. 'Wet' crops irrigated from river channels or perennial wells, and products of the self-sustaining black soil, are therefore least affected by vicissitudes of the seasons.

Soils.

The soils in Mysore vary from black cotton to light sandy

loam. A red-coloured loam, or clay loam, predominates. Differing from other soils of India, they are generally deficient in phosphoric acid, most of them containing less than 0·1 per cent. and the average containing barely 0·05 per cent. The percentage of potash is much higher, averaging three or four times that of phosphoric acid. In the hilly virgin-forest region in the west of the State, where coffee is largely grown, the percentage of nitrogen is very high, averaging more than 0·2 per cent. in the surface soil and nearly 0·15 per cent. in the second foot. In the eastern portion of the State, where the land has been cultivated a long time, less nitrogen is found. The surface is generally undulating (though flat in some parts and very hilly in others), here and there broken up by rocky hills and gravelly ridges. The annual rainfall varies from about 200 inches in the Western Ghāts to about 25 or 30 inches in the eastern part of the State. Excepting rice, coffee, cardamoms, pepper, areca-nut, and betel-leaf, very little cultivation is carried on in the forest region of heavy rainfall in the extreme west. The other part of the State, with a rainfall varying from about 20 to 60 inches, grows principally *rāgi*, *jola*, various pulses and oil plants on the 'dry' lands, with cotton and tobacco in some localities, and principally rice and sugar-cane on the irrigated fields[1].

Conformation of surface. Rainfall.

The population engaged in and dependent on agriculture, according to the Census of 1901, is 3,657,462, or 66 per cent. of the total. Of these, 951,056 males and 179,876 females are actual workers, and 941,867 males and 1,584,663 females are dependents.

Agricultural population.

The staple food-grains are: *rāgi* (*Eleusine coracana*), rice (*Oryza sativa*), *jola* (*Sorghum vulgare*), other millets (*Panicum*), gram (*Dolichos biflorus*), and other pulses. Oilseeds include gingelly (*Sesamum*) and castor (*Ricinus*); the chief fibres are cotton and *san*-hemp; among spices may be mentioned chilli or capsicum, ginger, coriander, cummin seed, &c.; and among miscellaneous crops—tobacco, mustard, onions, garlic, &c.

Principal crops.

The months for sowing the principal crops are June and July, and November is the general harvest time. But the pulses *avare* and *togari*, which are sown along with *rāgi*, ripen two or three months later. Horse-gram is sown in October or November, and ripens in three months. Of rice there are two crops, the Kārtika *fasal*, or *kār*, maturing in October or November, and the Vaisākha *fasal*, or *hain*, maturing in April

Sowing and harvest.

[1] This paragraph was contributed by Dr. A. Lehmann, Agricultural Chemist to the Government of Mysore.

or May. The ordinary sugar-cane is planted about April and takes twelve months to mature. Other kinds are planted in August or February, and require fourteen months. Cotton is sown in June and ripens in six months, continuing to yield for four months, and the second year's crop is better.

Kumri cultivation. *Kumri* or shifting forest cultivation is practised only by wild hill tribes in the west and south, and is permitted in some parts under certain restrictions. Under this system jungle is burnt down and seed planted in the ashes.

Agricultural implements. Agricultural implements in general are such as have been in use for ages. The principal new appliance that has been to some extent adopted is an iron mill for expressing the juice of the sugar-cane, which has in many parts replaced the old cumbrous apparatus.

Fruit and vegetable production. Fruit and vegetable production has received special attention in the neighbourhood of Bangalore. Apples, strawberries, potatoes, peas, and cauliflowers may be mentioned among European products that are well established. Of native fruits, the grafted mango is largely cultivated. Areca-nut, coco-nut, and plantains are general in irrigated land. The best areca-nut is a special production of Nagar and the moist west. Coco-nut is grown without irrigation in the central parts of the State, and the dried kernels are an article of export. A horticultural garden is maintained by the State in the Lāl Bāgh at Bangalore, and an exotic fruit garden at Nandidroog. Native florists do a good business in plants.

Agricultural department. To the Agricultural department are attached an agricultural chemist, with assistants, a mycologist, and an entomologist. A well-equipped chemical laboratory has been fitted up at Bangalore, where analyses are made of soils, of the composition of manures and fertilizers, of the quality of special products like coffee, and of roots, bulbs, and other wild edibles that may be of use as food in time of famine. Prevalent insect pests and plant diseases are investigated with a view to devising remedies. Plot experiments are being conducted in the cultivation of sugar-cane, *rāgi*, sweet potato, and ground-nut. A plant-house for pot culture is being erected. An experimental farm has been formed near Bangalore, where 'wet' and 'dry' crops are being raised. In the Lāl Bāgh garden at Bangalore rubber, fibre, and cotton plants are receiving attention. At the Kunigal stud farm special kinds of rice are being tried. Arrangements have been made for imparting instruction in practical agriculture at the normal school in Mysore and at eight other State schools, and in sericulture at Mr. Tata's silk

farm in Bangalore. Moreover, a few model holdings in each *tāluk* are being selected by the *amaldārs*, belonging to intelligent tenants who are willing to cultivate them on improved methods according to expert advice. Agricultural shows are to be held at the District head-quarters and prizes awarded by the State.

Loans for land improvement during the thirteen years ending with 1903-4 came to a total of 1·6 lakhs. In the same period 7·1 lakhs was also advanced for 3,068 irrigation wells, of which 2,212 were completed. For *sāguvali kattes* or cultivation embankments Rs. 11,000 was advanced. Agricultural loans.

There were fifty-nine agricultural banks in 1904, of which twenty-one were reported to be working satisfactorily, but taken altogether they have not been a success. Two banks intended for the benefit of native coffee-planters had received loans up to nearly 9 lakhs, of which more than $3\frac{1}{2}$ lakhs was outstanding. They have since been closed, and individual contracts for repayment made with the estates which had received loans. The advances to the remaining banks had amounted to $7\frac{1}{2}$ lakhs, of which 1 lakh was recovered. Owing to lax management thirteen banks have had the advances made to them recalled. The loans granted by the banks, exclusive of renewals, amounted to $10\frac{3}{4}$ lakhs, of which 7 lakhs was used to liquidate previous debts, and the rest for agricultural purposes. The balance due to the State in 1904 for loans and interest was 13 lakhs. Agricultural banks.

The cultivators are for the most part in debt, but not heavily, their liabilities generally ranging between Rs. 50 and Rs. 100. In villages the creditors are, as a rule, themselves agriculturists, but in towns they are more often money-lenders. The rate of interest on private loans to agriculturists varies. In some places in the Malnād the rate till recently ranged between 24 and 36 per cent. In other parts it used to be 18 per cent. The rate is now everywhere lower, the minimum being 12 and the maximum 18 per cent. A Co-operative Societies Regulation was passed in 1905, from which good is anticipated.

The Amrit Mahāl is the principal cattle-breeding establishment. Its head-quarters are at Hunsūr, and grazing-grounds called *kāvals* are reserved for its use in different parts of the country. In 1903–4, with 9,686 head of cattle, the births were 42·5 per cent. on the average number of breeding cows, and the deaths 9·3 per cent. on the total stock. The sales, including 150 young bullocks to the Madras Transport Dépôt Cattle.

at the usual rate of Rs. 50 each, realized an average of Rs. 36 per head. Amrit Mahāl bullocks are famed for their pluck and endurance, being as superior to others as thoroughbreds among horses. The best breed is the Hallikār. The ordinary cattle are of the Mādesvaran-betta and Kānkānhalli breeds, both named from places in the south-east of the State. Amrit Mahāl bulls are stationed by Government in various parts for improving the breed of cattle used by the ryots. Six Amrit Mahāl cows were sent to the Chin Hills in Northern Burma to be crossed with *mithan* bulls (*Bos frontalis*). Large cattle fairs are held at Nandi, at the *ghāt* north of Dod-Ballāpur, at Santemāranhalli, and other places. An ordinary pair of plough bullocks costs from Rs. 30 to Rs. 50 or more; superior trotting and draught-bullocks, Rs. 70 to Rs. 200 or more. Buffaloes are extensively used for supplying milk, and for carrying manure and ploughing in heavy land.

Statistics of Agriculture

(Areas in square miles)

	Average, 1881-90.	Average, 1891-1900.	1900-1.	1903-4.
Total area shown in village papers	...	...	27,248	27,270
Total uncultivated area	17,404	19,706	18,057	17,588
Cultivable but not cultivated	4,700	2,891	4,321	3,871
Uncultivable	12,704	11,155	13,736	13,717
Total cultivated area	8,261	8,978	9,191	9,682
Irrigated from canals	...	137*	166	175
" " wells and tanks	...	773*	878	992
" " other sources	...	347*	314	406
Total irrigated area	1,100	1,497	1,358	1,573
Unirrigated area	4,644	7,331	7,833	8,109
Cropped area.				
Rāgi	...	3,746	3,293	3,499
Rice	945	1,107	1,118	1,239
Other food-grains and pulses	5,548†	2,897	3,682	3,752
Oilseeds	280	458	516	543
Sugar-cane	45	50	64	65
Cotton	56	87	71	109
Other fibres	4	10	37	18
Coffee	203	209	199	195
Tobacco	36	22	21	26
Miscellaneous	291	453	581	627
Total area cropped	7,408	9,039	9,582	10,073
Area double-cropped	...	237	391	391

NOTE.—The principal crops raised by means of irrigation are rice, sugar-cane, and wheat.

* Only nine years' average. † Includes *rāgi*.

Sheep and goats.

Sheep and goats were kept on farms under the Amrit Mahāl *dārogas*. In 1902, with 1,694 head, there were 308 births

and 294 deaths. Owing to similar poor results over a series of years, the flocks were then sold, only 257 sheep of Australian and Kashmir breeds being retained. The ordinary country sheep are the Kurubar. They are shorn twice a year, and the wool is made into rough *kamblis*. Fine fighting rams are produced. Sheep are folded on fields for the sake of their dung, which is highly valued.

The stud farm is at Kunigal. In 1904 there were five stallions, 81 brood mares, and 200 foals, of which 35 were born in the year. Good native cavalry remounts are produced. Horses.

From Kāthiāwār three wild asses (*Equus hemionus*) were obtained in order to breed a larger type of donkeys in the State, and for mule-breeding, for which there is a farm near Devanhalli. Asses. Mules.

The principal cattle diseases are anthrax, foot-and-mouth disease, malignant catarrh, and lung diseases. Rinderpest has also been known. There is a civil veterinary officer only for Bangalore; but the natives have their own remedies and methods of treatment, among which cautery or branding with hot iron is very common. Cattle-diseases.

The sources of irrigation are channels drawn from dams on the rivers, besides tanks and wells. The most important of the river channels are in the south of the State, connected with the CAUVERY and its tributaries. Most of them were originally constructed centuries ago, but have been improved and extended. The water is let out according to the needs of the rice or sugar-cane crops, and confined to the proper seasons for them. To put an end to complaints of unequal distribution, the management of the river channels in the irrigation season was in 1888 put under the *amaldārs* of the *tāluks* through which they run, and the hot-season supply to sugar-cane and garden tracts was arranged to be given at fixed periods, in consultation with the Deputy-Commissioners concerned. There is no separate water rate, but the fixed assessment includes the full value imparted by soil and water combined. The value of the channel water-supply is determined on the basis of quantity, duration, and facility, according to the established capacity of each channel. The supply of water from tanks is similarly regulated. The receipts from river-fed channels in 1903–4 amounted to $6\frac{1}{2}$ lakhs, and the net profits to 5 lakhs. The best wells are those throughout the north-east, fed by *talpargis* or spring-heads. The water is raised by either the *yāla* or the *kapile*. The former, also known as *picottah*, is a lever with an iron bucket attached at Irrigation. Water lifts.

the water end by a bamboo rod. The lever is weighted at one end with stones, or else raised and depressed by a man standing on it near the fulcrum post. The *kapile* has an inclined plane or ramp, down which bullocks draw a stout rope attached to a large leathern bucket.

A very large irrigation work is under construction at Māri Kanave on the Vedāvati. Other prominent recent works for the same purpose are Bora Kanave, Māvatūr tank, Srīnivāsa Sāgara, &c. Various projects in different parts have been examined.

Rent, wages, and prices.

The general system of land tenure is *ryotwāri*, under which small separate holdings are held direct from Government. There is also a certain number of *inām* tenures, which are wholly or partially revenue free. In 1904 there were 965,440 *ryotwāri* holdings, with an average area of 7·11 acres, and an average assessment of Rs. 9–6–1. The *inām* holdings numbered 84,548, with an average area of 20·8 acres, and an average assessment of Rs. 6–5–0. A special class are the leaseholders of gold-mines, whose holdings numbered 44, with an average area in each estate of 912·5 acres, assessed at an average of Rs. 439–6–7.

The sum payable by the cultivator, which is revenue rather than rent, is determined mainly by the class of soil and kind of cultivation. After the revenue survey, the settlement of this point is effected on the following system. Nine classes of soil are recognized, and all the land is divided into 'dry,' 'wet,' and garden land. In the two latter, in addition to soil classification, the water-supply is taken into consideration, and its degree of permanency or otherwise regulates the class to which it is referred. In the case of gardens irrigated by wells, in addition to the classification of soil, the area of land under each, and the distance of the garden from the village, as affecting the cost of manuring, &c., are carefully ascertained. Villages are grouped according to their respective advantages of climate, markets, communications, and the agricultural skill and actual condition of the cultivators. The maximum rates for each class of cultivation are then determined by reference to the nature and effects of past management of the *tāluk* for twenty years, and by examination and comparison of the annual settlements of previous years. These having been fixed, the inferior rates are at once deduced from the relative values laid down in the classification scales.

Of measures intended to improve the position of the cultivators and to relieve them from indebtedness, one of the

principal has been the collection of revenue in instalments at such times as enable the cultivator to sell his crop first. There is also the recent Co-operative Societies Regulation. Taking the natural divisions of east and west, the average rate per acre in the former in 1904 was Rs. 1-7-3, the maximum and minimum being Rs. 2-1-11 and R. 0-10-8; in the latter, the average was Rs. 1-13-1, the maximum and minimum being Rs. 1-14-1 and Rs. 1-12-5. The *batai* system, or payment of revenue by division of the crop, which formerly prevailed, has been entirely replaced by cash-rates.

The daily wages for skilled labour vary in different parts from 6 annas to Rs. 1-8-0, and for unskilled labour from 2 annas to 8 annas. While the latter has remained at about the same figure as regards the minimum, with a tendency to rise, the former has increased in the last twenty years from 50 to 100 per cent. Payment in kind is becoming less common, probably owing to the influence of railways, mining and other industries, and large public works, the labourer being less tied down to single localities, and having greater facilities to travel at a cheap rate.

The following table relating to the staple food-grains shows that there has been a general rise in prices, except in the case of salt, which is cheaper:—

Prices (seers per rupee).		In 1880.	Average for ten years ending	
			1890.	1900.
Rāgi	East	40.84	36.25	30.40
	West		34.38	33.23
Rice (common)	East	15.4	13.63	10.60
	West		14.61	11.66
Jola	East	...	...	24.53
	West			24.28
Gram (Bengal)	East	14.46	13.51	11.29
	West		14.59	11.72
Salt	East	8.98	10.42	10.00
	West		10.06	

Taking five-year periods from 1876, the percentage of increase in the retail prices of these grains on those for 1871-5 at the central marts of Bangalore and Mysore is shown in the table on the next page.

The initial increase was due to the famine of 1876-8. A great drop succeeded till 1895, owing at first to good seasons and diminished population, and later to freer means of communication also. In the last period prices have been rising,

owing probably both to short crops locally and to the
of famine-stricken parts elsewhere, especially in Weste

	Bangalore.				Mysore.		
	Rāgi.	Rice.	*Jola.*	Gram.	*Rāgi.*	Rice.	*Jol.*
1876–80 .	99	45	41	40	123	40	94
1881–5 .	19	21	–12	–20	56	2	31
1886–90 .	9	26	–5	96	25	3	5
1891–5 .	44	58	10	115	68	35	51
1896–1900	79	55	30	149	107	34	74

Material condition. The general condition of the people has been
improving since the middle of the last century, and h
special progress in the past thirty years, as shown by
in both wages and prices, and in the standard o
A moderate assessment has relieved the cultivators, v
easy means of communication provided by roads and
together with freer postal facilities, have stimulated th
prise of traders and benefitted all classes. The pro
of extensive public works has given labourers and
ready employment, and public servants have had exc
opportunities of rising to good positions. On the oth
there have been bad seasons in certain years, and in
a great famine. Coffee-planting has been almost ru
the fall in prices. Cardamoms have suffered from t
cause, and areca-nut has been injured on a large s
disease. Plague has also in recent years interfered
with the well-being of the people. But education and
aid are now brought to the doors of all classes,
important centres the population are better housed
clothed, and better fed than in the generations past.

Forests. The area of State forests, which are 'reserved'
under a Conservator of Forests, was 2,094 square
1904, besides about 1,400 square miles of Ghāt for
kāns. The unreserved or District forests, which ar
the revenue authorities, covered 612 square miles. Th

Natural belts. may be divided into evergreen and deciduous. The e
forests are confined to the Western Ghāts and the
below them on the east, extending from the north
to the south of Manjarābād, in a belt from 6 to 14 mil
On all sides may be seen magnificent trees with clear
80 to 100 feet to the first branch. Poon-spar (*Calo
tomentosum*), ebony (*Diospyros Ebenum*), and wild jac
carpus hirsuta) are some of the trees. East of this is

belt, from 10 to 45 miles wide, extending from the north of Sorab to the south of Gundalpet. It contains the finest timber-producing forests, and is bordered on the east with much sandal-wood. It also comprises the best areca-nut and cardamom gardens, and the coffee plantations of Koppa and Manjarābād. Its junction with the evergreen belt on the west is marked by splendid *nandi* (*Lagerstroemia lanceolata*) and black-wood (*Dalbergia latifolia*). Teak, satin-wood, *sissu*, ironwood, and other trees abound in it, as well as bamboo. East again is the dry belt, covering the greater part of the State. Many of the trees found in the mixed belt recur here, but they are smaller, and the tree vegetation is generally inferior. Besides different kinds of *Ficus*, the mango, tamarind, and *jāmun*, the *ippe* (*Bassia latifolia*), and jack (*Artocarpus integrifolia*) grow well here. Acacias, the wood-apple, *bael*-tree, and *honge* (*Pongamia glabra*) also thrive. The bastard date-palm (*Phoenix sylvestris*) grows in the western part, and the dwarf date-palm (*Phoenix farinifera*) in the centre and west.

Reserved trees. There are twelve kinds of 'reserved' trees: Sandal-wood (*Santalum album*), teak (*Tectona grandis*), poon (*Calophyllum tomentosum*), black-wood (*Dalbergia latifolia*), *honne* (*Pterocarpus Marsupium*), *lac* or *jālāri* (*Vatica laccifera*), *nandi* (*Lagerstroemia lanceolata*), wild jack or *hesswa* (*Artocarpus hirsuta*), *kārāchi* or *kammar* (*Hardwickia binata*), *bili matti* (*Terminalia Arjuna*), *kari matti* (*Terminalia tomentosa*), ebony (*Diospyros Ebenum*).

Minor produce. The principal articles of minor forest produce are gall-nuts, tanning bark from *tangadi* (*Cassia auriculata*), and lac. Also soap-nut, gum, honey, beeswax, &c.

Disposal of forest produce. Elephants are employed in dragging timber from inaccessible places, and logs are floated down the western streams and channels. Large-sized timber is sold at the regular timber dépôts, and small-sized timber at temporary dépôts opened in convenient places. Bamboos are cut by licence. Sandal-wood, which is a State monopoly and the principal item of forest revenue, is sold at the various sandal-wood depots.

Fuel. Fuel reserves are formed in the District forests, and by special plantations, often of casuarina. Local needs are also provided for by the formation of village forests. Grazing is permitted to a certain extent on a system of licences; but in times of scarcity the State forests are thrown open where necessary.

Grazing.

Fire prevention. Working plans are being prepared for all the most important forests. Fire preventive measures have been extended over

1,823 square miles, of which 1,653 were successfully protected in 1903-4.

Forest revenue, &c.

The forest revenue, expenditure, and surplus have been as follows:—

	Average, 1882-90.	Average, 1891-1900.	1900-1.	1903-4.
	Rs.	Rs.	Rs.	Rs.
Revenue . .	8,96,847	13,27,064	12,48,083	15,90,761
Expenditure .	3,16,215	5,26,374	3,78,222	5,18,121
Surplus . .	5,80,632	8,00,690	8,69,861	10,72,640

Mines and minerals.

Gold is the only mineral raised from mines. These were being worked by thirteen companies in 1904, of which five paid dividends, three produced gold but paid no dividend, and the rest were non-producers. All but three, which are included in the non-producing class, belong to the Kolār Gold Fields. The ore is treated by milling and amalgamation, and the tailings by cyanide. Steam-power has been replaced since June, 1902, by electric power, generated at the Cauvery Falls, 92 miles distant. The number of persons employed in the industry in 1903 was 27,355. Of these, 76 per cent. were Hindus, 18 per cent. Christians, and 6 per cent. Muhammadans. The great majority of the Hindus were Holeyas, the others being mostly Wokkaligas, Tigalas, and Woddas. The Christians consisted of 17 per cent. Europeans, 22 per cent. Eurasians, and 61 per cent. natives. The amount paid in wages was 70·3 lakhs, which gives an average earning of Rs. 257 per head per annum. The five dividend-paying companies are the Mysore, Champion Reef, Ooregum, Nundydroog, and Balaghat. The nominal capital of all the companies was £2,958,500, and paid-up capital £2,683,000. All the gold produced is dispatched to England. Minerals as yet unworked in the State include a small quantity of asbestos. Iron is smelted in several places. Some manganese has lately been exported from Shimoga District.

Arts and manufactures. Cotton-weaving.

For cotton-weaving the loom is placed over a kind of well or hole, large enough to contain the lower portion of the machinery, which is worked on the pedal principle with the toes, the weaver sitting with his legs in a hole. The combs are supported by ropes attached to beams in the roof, working over pulleys, and stretching down into the well to the toes of the weaver. In his right hand is the shuttle, which contains the thread, and which, passed rapidly through the spaces created by the combs, forms the pattern. The principal comb

is held in the left hand. As the cloth is manufactured, it is wound on the beam by slightly easing the rope on the right hand and turning round the lever. In addition to cotton stuffs used for clothing, the principal fabrics made are tape for bedsteads, carpets or rugs, tent cloth, cordage, &c. Steps have recently been taken to introduce the fly-shuttle; and six weaving-schools for instruction in its use have been established at Hole-Narsipur, Dod-Ballāpur, Chiknāyakanhalli, Molakālmuru, and other places, with carpentry and drawing classes attached.

QUANTITY AND VALUE OF MINERALS PRODUCED

Minerals.	1891.		1901.		1904.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.
		Rs.		Rs.		Rs.
Gold . oz.	109,643	55,77,930	530,142	1,92,30,810	607,574	2,32,31,830
Iron . .	573	30,000	* 129	26,120	346	26,530
Corundum .	11	666	82	5,352	745	...
Mica . .	...	...	3	240	...	...
Salt . .	...	...	494	30,517	855	65,284
Limestone .	...	...	29,062	1,02,189	25,085	2,52,921

* Also iron ore, 743 tons.

Silk fabrics of stout texture and excellent designs are made, chiefly by Patvegars and Khattrīs, in Bangalore and Molakālmuru. Women of the wealthier classes are often richly attired in silk cloths on ceremonial or festival occasions. These, with or without gold and silver or gilt lace borders, are largely manufactured at Bangalore; the silk and wire used for the purpose are also produced in the State. Sericulture is extensively carried on in the Closepet, Kānkānhalli, Māgadi, Chik-Ballāpur, Tirumakūdal-Narsipur, and other *tāluks*; but Bangalore is the centre of the silk trade, where raw silk is prepared on a considerable scale for the loom and dyed. There has recently been established here, by the late Mr. J. N. Tata of Bombay, an experimental silk farm under Japanese management for improved systems of silkworm rearing, so as to eliminate disease in the worms by microscopic examination of the seed, and for better reeling. Near Yelahanka is also an improved farm belonging to Mr. Partridge for the scientific rearing of silkworms. Silk-weaving.

The carpets of Bangalore are well-known for their durable quality, and for having the same pattern on both sides. The old patterns are bold in design and colouring. The pile carpets and rugs made in the Central jail from Persian and Carpets and rugs.

Turkish designs are probably superior to any other in India. Sir George Birdwood says[1]:—

'The stone slab from Koyundjik (palace of Sennacherib), and the door-sill from Khorsabad (palace of Sargon), are palpably copied from carpets, the first of the style of the carpets of Bangalore, and they were probably coloured like carpets. These South Indian carpets, the Masulipatam, derived from the Abbasi-Persian, and the Bangalore, without any trace of the Saracenic or any other modern influence, are both, relatively to their special applications, the noblest designed of any denomination of carpets now made, while the Bangalore carpets are unapproachable by the commercial carpets of any time and place.'

Carpets are less used now, and the industry has declined.

Jewellery characteristic of the State.

Gold circular or crescent-shaped ornaments worn by women on the hair are called *rāgate*, *kyādige*, and *jede bille*. Ornamental silver pins with a bunch of *chauri* hair for stuffing the chignon or plait are known as *chauri kuppe*. Ear-rings for the upper rim are named *bāvali*; those for the large hole in the lobe, *vōle* or *vāle*. A pear-shaped drop worn on the forehead is called *padaka*. Necklaces include *addike* and *gundina sara*. Bracelets are termed *kankani*; armlets, *vanki*, *nāgamurige*, *tolu tāyiti*, *bandi*, and *bājuband*. A zone is *dābu*. Anklets of silver are *luli*, *ruli*, and *kālsarpani*; little bells for them, worn by children, are *kālu gejje*. Silver toe-rings are called *pilli*. Silver chains worn by men round the waist are known as *udidhāra*. The silver shrine containing the *lingam* worn by Lingāyats is the *karadige*. Small silver money-boxes attached to the girdle are named *tāyiti*, while an egg-shaped silver *chunām* box is *sunna kāyi*.

Iron-work and steel.

Iron is widely diffused, and is obtained both from ore and from black iron-sand. The principal places where iron is smelted are in the Māgadi, Chiknāyakanhalli, Malavalli, Heggadadevankote, and Arsikere *tāluks*, and in the southern and central parts of Chitaldroog District, and in the eastern parts of Shimoga and Kadūr Districts. A steam iron-foundry has been established at Bangalore under European management. There are native iron-works at Goribidnūr and Chik-Ballāpur. Sugar-cane mills are made and repaired at Channarāyapatna. The local iron is used for making agricultural tools, ploughshares, tires for cart-wheels, farriery shoes, and so forth. But local manufacture has been driven from the field

[1] In his splendid book, called *The Termless Antiquity, Historical Continuity, and Integral Identity of the Oriental Manufacture of Sumptuary Carpets*, prepared for the Austro-Hungarian Government.

by the cheaper and better imported articles from Europe, turned out on a large scale with the aid of machinery. Steel of a very high quality can be made; but the methods used are primitive, and it cannot therefore compete with the highly finished European products of the present day, though it is preferred by the natives for the edge of cutting tools. Steel is made especially in the Heggadadevankote, Malavalli, and Maddagiri *tāluks*. Steel wire is drawn at Channapatna for strings of musical instruments, the quality of which makes them sought after throughout Southern India.

Brass and copper work.

The manufacture of brass and copper water and drinking vessels is to a great extent in the hands of the Bhogārs, who are Jains, some of the chief seats of the industry being at Sravana Belgola and Sitakal. Brass is also used for making lamp-stands, musical instruments, and images of the gods; and bell-metal for the bells and gongs used in temples and in religious services, and by mendicants. Hassan and Tumkūr Districts produce the largest number of these articles.

Pottery and sculpture.

The potter, as a member of the village corporation, is found in all parts, with his wheel and his mounds of clay. The principal articles made are pots for drawing or holding water, large urns for storing grain, pipe tiles, and so forth. For sculpture, potstone or soapstone is the common material; and of this superior cooking vessels are made, besides images of the gods, and various ornamental articles. In the higher departments of sculpture, such as statuary and monumental and decorative carving, Mysore holds a high place. The Jain statue of Gomata at Sravana Belgola, 57 feet high, standing on the summit of a hill which rises to 400 feet, is one of the most remarkable works of native art in India. The decorative sculpture of the Halebīd and Belūr temples Mr. Fergusson considers to be 'the most marvellous exhibitions of human labour to be found even in the patient East,' and such as he believes never was bestowed on any surface of equal extent in any building in the world. The erection of the new palace at Mysore is affording an opportunity of reviving the artistic skill of the sculptors.

Carving in wood and ivory, and inlaying.

Mysore is famous for its ornamental sandal-wood carving. It is done by a class called Gūdigar, who are settled in Shimoga District, chiefly at Sorab. The designs with which they entirely cover the boxes, desks, and other articles made are of an extremely involved and elaborate pattern, consisting for the most part of intricate interlacing foliage and scroll-work, completely enveloping medallions containing the repre-

sentation of some Hindu deity or subject of mythology, and here and there relieved by the introduction of animal forms. The details, though in themselves often highly incongruous, are grouped and blended with a skill that seems to be instinctive in the East, and form an exceedingly rich and appropriate ornamentation, decidedly Oriental in style, which leaves not the smallest portion of the surface of the wood untouched. The material is hard, and the minuteness of the work demands the utmost care and patience. Hence the carving of a desk or cabinet involves a labour of many months, and the artists are said to lose their eyesight at a comparatively early age. A number are being employed on work for the new palace at Mysore. Many old Hindu houses contain beautiful specimens of ornamental wood-carving in the frames of doors, and in pillars and beams. The art of inlaying ebony and rosewood with ivory, which seems to have been cultivated by the Muhammadans, and of which the doors of the mausoleum at Seringapatam are good examples, has latterly been revived at Mysore, and many useful and ornamental articles, such as tables, desks, album covers, &c., are now made there of this work. Similar inlaying is also met with in choice musical instruments, especially the *vīna* or lute.

Factory industries.

Coffee-works at Bangalore, belonging to a Madras firm, peel, size, and sort coffee in preparation for the European market. During the cleaning season, December to March, about 1,000 hands have been employed, and 1,500 tons of coffee, the produce of Mysore, Coorg, the Nīlgiris, Shevaroys, &c., once passed through the works. The present depression in coffee has reduced these figures to about a fourth. The factory is also engaged in compounding artificial manures for coffee plantations. There are other similar coffee-works at Hunsūr, as well as saw-mills. A Madras firm has a cotton-ginning factory at Dāvangere. A sugar factory has been established at Goribidnūr, and a brick and tile factory at Bangalore, for machine-made bricks and tiles, fire-bricks, drain pipes, &c. Mention has already been made of the iron foundry at Bangalore, and of the silk farm.

Cotton, &c., mills.

The Mysore Spinning and Manufacturing Company at Bangalore was established in 1883, and is under the management of a Bombay Pārsī firm. The nominal capital is Rs. 4,50,000. The mill contains 187 looms, and 15,624 spindles, and employs 600 hands. The Bangalore Woollen, Cotton, and Silk Mills Company at Bangalore was established in 1888, and has a capital of Rs. 4,00,000. It contains

14,160 spindles for cotton, and 26 looms and 780 spindles for woollens. The number of hands employed varies from 500 to 600. In 1903-4 the out-turn was 173,000 lb. of grey goods; 52,000 dozen of other goods; and 1,555,000 lb. of yarn.

Oil-mills. Oil-mills are at work in Bangalore. Oil-pressing from the various oilseeds grown in the country is the special calling of the class called Gānigas, who are found in all parts of the State. The number of private native mills was returned as 2,712 in 1904. Concessions for the distillation of the valuable sandal-wood oil are granted by the State.

Tanneries. Tanneries on a considerable scale are managed by Muhammadans in Bangalore, where hides are well cured and prepared for export to European markets.

Breweries. The only breweries are situated in the Civil and Military Station of Bangalore. Three supply the various beer taverns at Bangalore and the Kolār Gold Fields with what is called 'country beer.' The fourth makes a superior beer for the soldiers' canteens in barracks.

Commerce and trade. The extension of railways and the opening out of roads have greatly increased the facilities for trade. So far as the figures can be relied on, the value of exports is about double that of imports. The most valuable imports are grain and pulse, articles of iron and steel, raw silk, piece-goods, tobacco, and cotton thread. The chief exports, next to gold, are grain and pulse, betel-leaves, areca-nuts, raw silk, sugar and jaggery, coffee, and coco-nuts, chiefly the dried kernels. Among imports, tobacco trebled during the ten years ending in 1901. Among exports, while gold increased nearly 100 per cent., coffee fell 44 per cent. The export of sugar and jaggery and of coco-nuts (dry and fresh) doubled, while that of betel-leaves quadrupled.

The principal Hindu trading classes of the country are Banajigas, Komatis, and Nagartas; after whom come the Tamil Mudaliyārs, and the Musalmāns. The traffic in grain is not entirely in the hands of traders, for the ryots themselves are in the habit of clubbing together and sending off one or two of their number to deal in grain at any convenient market or fair. Apart from the railway, the common mode of carriage and transport is by country carts, the ordinary load of which exceeds half a ton, drawn by bullocks which go 18 to 20 miles a day. But in remote forest tracts and the hills, droves of pack-bullocks and asses are still used, the carriers being generally Lambānis or Korachas. Trade outside the State, excepting for gold and coffee, which are sent to England, is

chiefly confined to the surrounding British Districts. Gold goes via Bombay, coffee generally by way of Mangalore or Marmagao, the producers in both cases being, with hardly an exception, Europeans. The principal trading centres in the State are noted under their respective Districts. A Bangalore Trades Association has been formed, chiefly among the European shopkeepers in the Civil and Military Station.

Imports and exports.

The following table gives statistics of the total value (in thousands of rupees) of imports and exports. The total value of the rail-borne trade alone is given as—in 1890–1, imports 2·5 crores, exports 2·8 crores; in 1900–1, imports 3·8 crores, exports 3·4 crores. Details are not available.

	Imports.			Exports.		
	1890–1.	1900–1.	1904–5.	1890–1.	1900–1.	1904–5.
Areca-nuts	6,81	5,95	7,42	31,86	31,95	7.95
Betel-leaves	2,32	2,73	1,33	9,72	48,94	5,21
Coco-nuts	12,18	6,56	10,43	6,97	14,63	4.74
Coffee	24,45	2,43	1,22	43,55	19,04	26,83
Cotton, raw	7,87	1,82	2,18	1,95	1,02	50
„ twist and yarn	11,85	10,22	15,29	6,83	1,26	1,16
„ piece-goods	40,45	21,42	24,15	68	45	53
„ other manufactures	8,55	4,65	9,31	53	97	1.53
Grain and pulse	1,07,73	1,09,92	1,97,90	1,64,99	2,56,35	2,03,52
Hides and skins	41	35	63	2,00	1,28	4,02
Metals, gold	4,82	3,01	15,03	60,24	2,89,03	3,52,01
„ silver	4,10	12,87	12,46	90	2,06	1,70
„ iron	18,02	20,29	13,08	7,11	10	1
Oils	1,75	2,67	4,38	46	59	2,25
Poppy seeds	22	1,64	1,73	9	76	76
Silk, raw	17,39	29,56	19,47	13,91	23,95	17,01
„ manufactured	2,08	2,37	13,52	3,26	1,21	4,89
Spices	5,19	5,67	2,54	7,44	5,58	8,26
Sugar and jaggery	6,59	6,52	5,54	11,52	22,09	27,99
Tobacco	4,94	15,62	7,04	1,18	44	32
All other articles	...	1,47,87	55,20	...	1,05,06	19,68
Total	2,87,72	4,14,14	4,19,85	3,75,19	8,26,76	6,90,87

Means of communication. Railways.

The system of railways radiates from Bangalore, and there is no District without a railway running through some part of it. The Bangalore branch of the Madras Railway, standard gauge, runs for $55\frac{1}{2}$ miles in the State, east from Bangalore city to Bowringpet, then south-east to the main line at Jalārpet. From Bowringpet the Kolār Gold Fields branch, 10 miles in length, on the same gauge, runs first east and then south to the end of the Mysore Mine-field. The Southern Mahratta Railway, metre gauge, runs south-west through Mysore to Nanjangūd, and north-west through Harihar towards

Poona, for 312 miles in the State. From Yesvantpur a branch, 51 miles in the State, runs north through Hindupur to Guntakal on the Madras Railway. From Birūr a branch, 38 miles long, runs north-west to Shimoga. Surveys have been made to extend the line from Nanjangūd south-east to Erode on the Madras Railway, and also for a $2\frac{1}{2}$ feet gauge line to the west coast, either from Arsikere to Mangalore, 86 miles in the State, or from Mysore to Tellicherry, 58 miles in the State. The Southern Mahratta Railway Company has proposed a metre-gauge line from Mārikuppam in Kolār District to Dodbele station in Bangalore District, in order to provide direct communication between the Gold Fields and the port of Marmagao, and the survey for it is being made. A light railway on the $2\frac{1}{2}$ feet gauge, from Bangalore north to Chik-Ballāpur, 36 miles, is projected by a private company.

The total length of line open in 1891 was 367 miles, of which $55\frac{1}{2}$ were standard gauge, and the rest metre gauge. In 1904 the total was $466\frac{1}{2}$ miles, the addition being all metre gauge. The Kolār Gold Fields branch is worked by the Madras Railway; the remaining Mysore State lines by the Southern Mahratta Railway on short-term agreements. For the Mysore-Harihar line the Southern Mahratta Railway Company raised a loan on a guarantee of 4 per cent. interest by the Mysore State, which also pays to the company one-fourth of the surplus profits. Miles open.

The capital outlay on all the lines owned by the Mysore State has been 2·3 crores, of which 1·6 crores was incurred on the Mysore-Harihar line. The number of passengers carried in 1903–4 was $2\frac{1}{2}$ millions. The total expenditure was 7·7 lakhs, and the net earnings 7 lakhs. The Kolār Gold Fields and the Bangalore-Hindupur lines were the only two that showed a surplus, after deducting 4 per cent. for interest on the capital outlay. Capital outlay, &c.

The railways were expressly designed to serve as a protection against times of scarcity; and since the great famine of 1876–8, when the only railway was the Bangalore branch of the Madras Railway as far as the cantonment, the pressure of severe distress has been averted. Prices have no doubt tended to become equalized. It is not known that any change in the language or customs of the people has arisen from the extension of railways. Influence.

Trunk roads run through all the District head-quarters to the frontiers of the State, connecting the east coast and adjoining British Districts by way of the Mysore table-land Roads.

with the west coast. In 1856 there were 1,597 miles of road in the State. Besides the construction of new roads, improvements in the alignment of old ones, provision of bridges across rivers, and other measures to ensure free transit have since been continuously carried out. A good system of local roads radiates from each District head-quarters to all parts of the District. The previously almost inaccessible Malnād tracts in the west were the last to benefit, but these were generally opened up by about 1870. Much attention has also been paid to improving the *ghāt* roads through the passes in the mountains to the west. As railways have extended, feeder-roads have been made in those parts where none existed.

The old style of carts had a solid wooden wheel. They are known as Wodda carts, and are still employed at quarries for the transport of stone. But for general purposes they have long been superseded by carts with spoked wheels, but without springs. These take a load of over half a ton, and are drawn by a pair of bullocks. In the western parts a broad wain, drawn by several pairs of bullocks, is used for harvesting purposes.

In 1891 there were 1,730 miles of Provincial roads and 3,113 miles of District or Local fund roads. In 1904 the figures were 1,927 miles of Provincial roads, costing for upkeep an average of Rs. 199 per mile; and 3,502 miles of District or Local fund roads, maintained at an average cost of Rs. 72½ per mile.

Tramways. A steam tramway is proposed for 18 miles from Shimoga for the transport of the manganese ores that are being collected there.

Waterways. Owing to either rocky or shallow beds, none of the Mysore rivers is navigable, nor are there any other waterways for such use.

Post Office. The old postal system of Mysore, called the *Anche*, dates from the time of Chikka Deva Rājā in the seventeenth century. In 1889 it was amalgamated with the British postal service and the entire management transferred to that department, on condition of all the official correspondence of the State being carried within the limits of the State free of cost to the Darbār. There is no doubt that the change has been on the whole for the benefit of the public. For postal services Mysore is now a part of the Madras circle. In 1904 there were 428 post offices, and the mails were carried over 2,645 miles. The number of letters delivered was 7 millions, of post-cards 5 millions, of newspapers 650,000, of packets 660,000, and

parcels 150,000. The value of money orders issued was 53 lakhs. In the Post Office savings banks 38,586 persons deposited 10·12 lakhs, and 9·18 lakhs was drawn out.

In the Mysore Government savings banks there were 20,214 depositors in 1903-4. The opening balance of 73¾ lakhs was raised by deposits (34 lakhs) and interest to 110 lakhs, out of which 31 lakhs was paid in the year, leaving a balance of 79 lakhs at credit of the depositors.

The Mysore State Life Insurance scheme was instituted in 1892, and made obligatory on officials. Up to 1904 there had been issued 7,423 policies, assuring 44½ lakhs. Of this number 6,762 remained effective, assuring 40 lakhs. The second quinquennial valuation of the assets and liabilities of the Fund, made by an actuary in Edinburgh in 1902, confirmed its sound condition and the favourable nature of its terms.

Famine.

Failure of the rains for three seasons in succession brought about the famine of 1876-8, and, in general, failure of the rains in any part is the main cause of famine. Those parts which receive the least rainfall are therefore the most liable to suffer: namely, Chitaldroog District, and the northern parts of Tumkūr, Bangalore, and Kolār Districts.

Relative importance of crops.

Rāgi is the staple food of all the labouring classes, and if this crop fails there is widespread distress. A remedial measure is the raising of crops of *jola* on the dry beds of tanks, but this is only a partial palliative. If the *rāgi* season has passed, horse-gram is more extensively sown for human food, but this will not mature without some rain. *Rāgi* used formerly to be stored in underground pits, where it would keep good for ten years, to be brought out for consumption in times of scarcity. But the inducements now presented by high prices elsewhere and cheap means of transport have interfered with the replenishment of such stores, and consequently there is less resource of that kind to fall back upon. Rice, which is the main irrigated crop, is not much eaten except by Brāhmans, but always commands a ready sale for export.

Past famines.

The information about famines due to drought previous to that mentioned above is very scanty, but dreadful famines followed the devastations of the Marāthā armies and the wars with Mysore at the end of the eighteenth century. During the invasion of Lord Cornwallis, when, as Buchanan-Hamilton says, the country was attacked on all sides and penetrated in every direction by hostile armies, or by defending armies little less destructive, one-half at least of the inhabitants perished of absolute want. In the last century periods of scarcity occurred

in 1824, 1831, and 1833. The ten years following 1851 were a time of great trial, when year after year the sparse and ill-timed rainfall kept the agricultural classes in constant dread of actual want. Two or three seasons ensued which were prosperous, but in 1866 famine was again present in Chitaldroog and the north-eastern parts of the State.

Famine of 1877.

Bad, however, as these seasons were, and critical as was the condition of the country, the misfortune which was to come put them completely in the shade. The failure of rain in the years 1875-7 brought about a famine such as was never known before. The beginning of the calamity was the partial failure of the rains in 1875, the fall being from one-third to two-thirds of the average. Much of the food-crop was lost; but owing to the usual large stocks in the State, only temporary or occasional distress was caused, for the price of grain did not rise to double the ordinary rates. In 1876 the rainfall was again very short, and barely a third of the ordinary harvest was reaped. Matters were aggravated by the fact that crops had failed in the adjacent Districts of Madras and Bombay; and by the middle of December famine had begun. From then till March matters grew worse. The only railway, from Madras to Bangalore, brought in daily 500 tons of food (enough to support 900,000 people), yet the prices of food ranged during those months at four to five times the ordinary rates. In April and May, 1877, the usual spring showers fell, and hope revived. But as the month of June wore on and July came, it was apparent that the early rains were going to fail again, for the third year in succession. Panic and mortality spread among the people; famine increased and became sore in the land. In May 100,000 starving paupers were being fed in relief kitchens, but by August the numbers rose to 227,000, besides 60,000 employed on the railway to Mysore. It became evident that the utmost exertions of the local officers were unequal to cope with the growing distress. The Viceroy, Lord Lytton, visited Mysore, and appointed Mr. (now Sir) Charles Elliott as Famine Commissioner, with a large staff of European assistants. Relief works were now concentrated, and gratuitous relief was confined to those whose condition was too low to expect any work from them at all. Bountiful rains in September and October caused the cloud to lift, and the pressure of famine began to abate. During the eight months of extreme famine no crops were reaped; the price of grain ranged from three to six times the ordinary rates, and for the common people there were no means of earning wages

outside the relief works. Even in 1877–8 the yield of the harvest was less than half the crop of an ordinary year. From November, 1877, throughout 1878, prices ranged at nearly three times the rate of ordinary years. The mortality in this famine has been estimated at $1\frac{1}{4}$ millions in a population of $5\frac{1}{3}$ millions. Taking the ordinary mortality at 24 per 1,000 per annum, this was raised to nearly fivefold, while a mean annual birth-rate of 36 per 1,000 was reduced to one-half. Mortality.

The principal protective measures thus far successfully taken have been the extension of railways, so as to admit of the import and distribution of food-grains to all parts, and the extension of irrigation and other facilities for increasing cultivation. Plans for suitable relief works are also kept in readiness to be put into operation at the first appearance of necessity arising from scarcity. Protective measures.

His Highness the Mahārājā is the head of the State, having been invested with full powers on attaining his majority in 1902. In his name, and subject to his sanction, the administration is carried on by the Dīwān or prime minister, who is assisted by two Councillors. The Chief Court is the highest tribunal of justice, and is composed of a bench of three Judges, headed by the Chief Judge. There is a secretariat staff for the transaction of official business, and Commissioners and other departmental officers at the head of the various branches of the administration, with a Comptroller for finance and treasury affairs. The dynastic capital is at Mysore, but the administrative head-quarters are at Bangalore. The Mahārājā resides for part of the year at each of these places, but the higher offices of the State are located at Bangalore. The Representative Assembly meets once a year at Mysore at the time of the Dasara festival, when the Dīwān delivers his annual statement of the condition of the finances and the measures of the State, after which suggestions by the members are considered. Administration.

The administrative divisions of the State are eight in number, called Districts, with an average area of 3,679 square miles, and an average population of 692,425. They are Bangalore, Kolār, Tumkūr, Mysore, Hassan, Kadūr, Shimoga, and Chitaldroog. Each of these is named after its head-quarters, except Kadūr District, the head-quarters of which are at Chikmugalūr. Mysore is the largest District and Hassan the smallest. Administrative divisions.

The chief officer in charge of a District is the Deputy-Commissioner, who is assisted by a staff of Assistant Commissioners. The subdivisions of a District are *tāluks*, altogether

69 in number, averaging eight or nine to each District [1], with an average area of 427 square miles. These are formed into convenient groups of two, three, or four, which are distributed, under the authority of the Deputy-Commissioner, among the various Assistants and himself in such a way as to facilitate the dispatch of business and train the junior officers for administrative duties.

The officer in charge of a *tāluk* is the *amaldār*, assisted by a *sheristadār*, who has charge of the treasury and acts as his deputy in case of need. Large *tāluks* have a portion divided off into a sub-*tāluk* under the charge of a deputy-*amaldār*, but with no separate treasury. A *tāluk* is composed of *hobalis* or *hoblis*, the average number being six to ten. In each of these is a *shekdār*, or revenue inspector.

The headman of a village is the *pātel*, a *gauda* or principal farmer, who is assisted in revenue collections by the *shānbhog*, a Brāhman accountant. These offices are hereditary, and form part of the village corporation of twelve, called *ayagār* in Kanarese and *bāra balūti* in Marāthī. The other members of this ancient institution are the Kammar or blacksmith, the Badagi or carpenter, the Agasa or washerman, the Panchāngi or Joyisa, an astrologer and calendar maker, the Nāyinda or barber, the Mādiga or cobbler and leather-dresser, the Kumbar or potter, the Talāri or watchman, and the Nīrganti or distributor of water for irrigation. The dozen is made up in some parts by including the Akkasāle or goldsmith; in other parts his place is taken by the poet, who is also a schoolmaster. The respective duties of these village officials are definitely fixed, and their services are remunerated either by the grant of rent-free lands, or by contributions, on a certain scale, of grain, straw, &c., at harvest time.

Legislation and justice.

On the rendition in 1881 a schedule of Acts already in force in Mysore was appended to the Instrument of Transfer. A Legislative department, under a legislative secretary, was formed in 1886. There is no special Legislative Council. The various Regulations passed into law up to 1901 have been revised and published in two volumes, forming the Mysore Code. The first volume contains the Acts passed before the rendition and then taken over from the British Administration; the second volume contains the Regulations passed since. Among the later Regulations the following may be mentioned: To amend the Code of Criminal Procedure (I of 1888), Measures of Length (III of 1890), to amend the Mysore

[1] Kadūr has only five, while Mysore has fourteen, and Kolār ten.

Land Revenue Code (I of 1891), Infant Marriages Prevention (X of 1894), Village Sanitation (I of 1898), General Clauses (III of 1899), Electricity (IV of 1900), to amend the Mysore Mines Act (VI of 1900), Land Improvement Loans (I of 1901), Mysore Civil Courts (III of 1901), Code of Civil Procedure (VI of 1901), Indian Evidence Act (VIII of 1901), Local Boards (II of 1902), Weights and Measures (III of 1902), Registration (I of 1903).

Civil justice.

STATISTICS OF CIVIL JUSTICE

	Average for ten years ending		1900-1.	1903-4.
	1890.	1900.		
Suits for money and movable property	12,668	19,764	17,931	17,210
Title and other suits	2,402	2,347	1,654	1,019
Rent suits	656	577	501	580
Total	15,726	22,688	20,086	18,809

In 1903 there were 16 Munsifs' courts, 5 Sub-Judges' courts, 3 District courts, and the Chief Court. Munsifs exercise original jurisdiction in cases up to Rs. 2,500 in value; Subordinate Judges have jurisdiction in cases from above Rs. 2,500 to Rs. 10,000, and hear appeals from decisions of Munsifs if referred to them by the District Judge; District courts have unlimited jurisdiction, and hear appeals from decisions of Munsifs, and from those of Subordinate Judges within the limit of Rs. 3,000; the Chief Court, sitting as a bench of not less than two Judges, disposes of all other appeals brought before it.

Criminal justice.

STATISTICS OF CRIMINAL JUSTICE

	Average for ten years ending		1900-1.	1903-4.
	1890.	1900.		
Number of persons tried:				
(*a*) For offences against person and property	17,056	18,867	18,848	16,533
(*b*) For other offences against the Indian Penal Code	3,039	3,959	3,565	3,376
(*c*) For offences against Special and Local laws	2,984	4,071	4,626	2,869
Total	23,079	26,897	27,039	22,778

In 1903 there were 122 Subordinate Magistrates, 3 Sessions Judges, 8 District Magistrates, and the Chief Court. The Subordinate Judges of Chikmugalūr, Chitaldroog, and Hassan were also invested with the powers of Assistant Sessions Judges. In 1887 the system of trial by jury was introduced in Sessions cases. For appellate jurisdiction in criminal cases, the benches of the Chief Court that sit for civil appellate work dispose also of criminal appeals. The Chief Court moreover acts as a court of reference and a court of revision.

Registration.

The Excise Commissioner is also Inspector-General of Registration. The number of sub-registry offices in 1904 was 80, of which 59 were special, or with paid establishments, the remainder being in charge of *tāluk* revenue officers. The number of documents registered from 1881 to 1890 averaged 21,747; from 1891 to 1900, 46,251; and in 1904 the number was 57,637.

Finance.

PRINCIPAL SOURCES OF ORDINARY REVENUE

(In thousands of rupees)

	Average for ten years ending		1900-1.	1904-5.
	1890.	1900.		
Land revenue	77,33	94,16	98,31	96,69
Mining leases	60*	8,36	14,45	16,91
Stamps	4,99	7,27	7,94	7,16
Excise	14,81	31,34	36,17	37,75
Provincial rates	3,81	3,83	3,10	3,64
Assessed taxes	2,98	2,78	2,16	3,01
Forests	8,76	13,35	12,58	18,90
Registration	25	45	1,25	1,18
Other sources	7,56	15,93	15,78	29,22
Total	1,21,09	1,77,47	1,91,74	2,14,46

* From 1885-6.

In addition to the local audits, the State accounts have been examined at various times by auditors deputed by the Government of India. The revenue under all heads has risen. The increase in land revenue is due to extension of cultivation. Since 1885 mining leases and the royalty on gold-production have added a new item to the revenue. The increase in excise is due mainly to an improved system of control, but also to a larger consumption arising from higher wages and the influx to the Gold Fields, and from the employment on railways, public works, and coffee plantations of classes with drinking habits. The decrease under land customs and assessed taxes is due to these duties being transferred to municipalities wherever they exist.

The only customs retained by the State are on areca-nuts, the bulk of which are the produce of Kadūr and Shimoga Districts. An increase under forests took place owing to a revival of the market for sandal-wood, and to a greater supply of sleepers for railways. Subsequently the war between China and Japan temporarily crippled one of the principal sandal-wood markets, and not only did the demand for railway sleepers cease with the completion of the lines, but coal began to be substituted for wood as fuel for the engines. Since 1902 a substantial return has been received from the Cauvery Power installation for supplying electricity to the gold-mines.

EXPENDITURE UNDER PRINCIPAL HEADS

(In thousands of rupees)

	Average for ten years ending 1890.	Average for ten years ending 1900.	1900–1.	1904–5.
Charges in respect of collection (principally land revenue and forests)	16,29	21,09	22,47	23,41
Salaries and expenses of Civil Departments:				
(a) General administration	3,02	6,15	8,29	8,18
(b) Law and justice	6,05	9,18	10,22	10,41
(c) Police	5,18	8,24	9,65	9,80
(d) Education	1,68	4,87	6,65	7,73
(e) Medical	1,53	2,87	4,29	5,86
(f) Otherh eads	6,23	8,19	10,98	10,66
Pensions and miscellaneous civil charges	40,74	53,33	68,36	66,43
Famine relief	1	20	7	...
Irrigation	5,42	11,16	8,04	14,72
Public works	9,19	34,59	49,08	40,72
Other charges and adjustments	14,21	13,85	14,14	19,06
Total expenditure	1,09,55	1,73,72	2,12,24	2,16,98

Land revenue.

The land tenures in the State are *sarkār* or State, and *ināṃ*. The former are held under the *ryotwāri* or individual tenure, on payment of *kandāyam* or a fixed money assessment, settled for thirty years. *Kandāyam* lands are held direct from the State on annual leases, but the assessment is not as a rule altered or raised during the period for which it is fixed. The ordinary rates of assessment apply to the whole extent of the ryot's holding, and not to the area actually cultivated, as he has rights to a certain extent over included waste. Remission of assessment is not given in individual cases; but when there is general loss of crop in a locality and consequent distress, remission may be granted as a measure of relief.

Land tenures.

In the case of private estates, such as *inām* and *kāyamgutta* villages, and large farms of Government lands cultivated by *payakaris* or under-tenants, the land is held on the following tenures: *vāram*, or equal division of produce between landlord and tenant, the former paying the assessment of the land to the State; *mukkuppe*, under which two-thirds of the produce goes to the cultivator, and one-third to the landlord, who pays the assessment; *arakandāya* or *chaturbhāga*, under which the landlord gets one-fourth and the cultivator three-fourths of the produce, each paying half the assessment; *wolakandāya*, in which the tenant pays a fixed money-rate to the landlord, which may either be equal to or more than the assessment.

A hereditary right of occupation is attached to all *kandāyam* lands. As long as the ryot pays the State dues he has no fear of displacement, and virtually possesses an absolute tenant-right as distinct from that of proprietorship. When the State finds it necessary to resume the land for public purposes, he always receives compensation, fixed either by mutual agreement or under the Land Acquisition Act. No legislation has been passed to check the acquisition of land by non-agricultural classes.

In the Malnād or hill country towards the Western Ghāts the holdings of the ryots are called *vargs*. A *varg* consists of all the fields held by one *vargdār* or farmer[1]; and these are seldom located together, but are generally found scattered in different villages, and sometimes in different *tāluks*. Attached to each *varg* are tracts of land called *hankalu* and *hādya*, for which no separate assessment is paid. *Hankalu* lands are set apart for grazing purposes, but have sometimes been used for 'dry' cultivation. Those attached to 'wet' fields are called *tattina hankalu*. *Hādya* are lands covered with low brushwood and small trees, which supply firewood or leaves for manuring the fields of the *varg*. Tracts of forest preserved for the sake of the wild pepper vines, *bagni*-palms, and certain gum-trees that grow in them, are called *kāns*, for which a cess is paid.

Coffee.

Lands for coffee cultivation have been granted from State jungles, chiefly in the Western Ghāt region. The plot applied for was sold by public auction. If the jungle was to be cleared, notice was given, to allow of officials removing or disposing of 'reserved' trees. Besides coffee nothing may be grown on the land, except shade trees for the coffee. Within five years a minimum of 500 coffee-trees to the acre must be

[1] These terms often appear as *warg* and *wargdār* in official papers.

planted. On the coffee-trees coming into bearing an excise duty, called *hālat*, of 4 annas per maund, was formerly levied on the produce, in lieu of land rent. But from 1885 an acreage assessment was substituted—either R. 1 per acre, with a guarantee for thirty years on the terms of the survey settlement, or a permanent assessment of Rs. 1½ per acre, on the terms of the Madras Coffee Land rules. Nearly all the large planters have adopted the latter conditions. But the great fall in the prices of coffee in recent years, owing to the competition of South America, has reduced this previously flourishing industry to a very depressed condition.

Rubber. Lands have been offered since 1904 for rubber cultivation, in plots of 50 acres, selected with the consent of the Forest department, to be held free of assessment for the first five years, and subject to the assessment fixed by the survey settlement in the sixth year and after. The work of planting must be commenced within one year from the date of the grant; and in stocking the area with rubber plants, trees may not be felled without permission.

Cardamoms. Lands for cardamom cultivation are granted from the jungles on the eastern slopes of the Western Ghāts, where the plant grows wild. Tracts of not less than 5 or more than 200 acres, when applied for, are put up to auction, and may be secured on a twenty years' lease on terms similar to those for coffee lands. Not less than 500 cardamom plants per acre must be planted within five years, and nothing else may be cultivated on the ground. Trees, except of the 'reserved' kinds, may be felled to promote the growth of the cardamoms.

Miscellaneous. The tenure called *kāyamgutta* literally means a 'permanent village settlement.' It owes its origin probably to depopulated villages being rented out by the State on a fixed but very moderate lease, on the understanding that the renter would restore them to a prosperous condition. But in the early part of last century even flourishing villages were granted to court favourites on this tenure, and some of the most valuable lands are thus held. *Shrāya* lands are waste or jungle tracts granted on a progressive rent, in order to bring them under cultivation. They are free of assessment for the first year, and the demand increases afterwards yearly from one-quarter to full rates in the fourth or fifth year. For the planting of timber, fruit, and fuel trees, unassessed waste land, or assessed 'dry' land, if unoccupied for ten years consecutively, is granted free of assessment for eight years, then rising by a quarter rate to full assessment in the twelfth year.

Inām tenures.

The conditions on which *inām* tenures are held vary considerably. Some are free of all demands, while in others the usual assessment is reduced. The grants differ also in origin, according as they were made to Brāhmans, for religious and charitable purposes, to village servants, for the maintenance or construction of tanks and wells, or otherwise.

Exploring and prospecting licences.

Licences for exploring for minerals, on areas approved by Government, are granted on deposit of a fee of Rs. 10, to run for one year. No private or occupied lands may be explored without the consent of the owner, occupier, or possessor. Prospecting licences for minerals may be obtained for one year, on a minimum deposit of Rs. 100, and a rent of Rs. 50 per square mile or portion of a square mile. The licensee may select, within the year, a block for mining, not exceeding one square mile, in the licensed area.

Mining leases.

Mining leases limited to one square mile, of rectangular shape, are granted for thirty years, on deposit of Rs. 1,000 as security, and furnishing satisfactory evidence that a sum of £10,000 will be raised within two years for carrying on mining operations on the block of land applied for. The cost of survey and demarcation is paid by the applicant, and mining operations must start within one year. An annual rent of R. 1 per acre is payable to the State on the mining block, together with all local cesses and taxes; and in each year in which a net profit is made, a royalty of 5 per cent. is levied on the gross value of gold and silver produced. If the net profits exceed £25,000, an additional royalty is payable of 5 per cent. on the net profits above that sum. But in the case of a registered company, the royalty may be paid on divisible instead of net profits.

Land assessment.

The land revenue assessment is fixed by the Revenue Survey department on the method already described (p. 60, above). The system resembles that followed in Bombay, which was preferred to that of Madras. The former was chosen because all the steps in survey, classification, and settlement are under the direction of one responsible head, and made to fit into one another.

The present revenue survey was introduced in 1863, and the settlement was completed in 1901. The settlements made under it are current for thirty years. The previous survey, made at the beginning of the nineteenth century, was necessarily very imperfect; and after the lapse of fifty years the records had become extremely defective, advantage being taken of the insurrection in 1830 to destroy the survey papers in many cases.

In 1700 the Mysore king Chikka Deva Rājā acknowledged one-sixth to be the lawful share of the crop to be paid to him, but added a number of vexatious petty taxes to enhance the amount indirectly. In Bednūr (Shimoga District) Sivappa Naik's *shist*, fixed in 1660, was one-third of the gross produce. This continued for thirty-nine years, after which various additions were made, chiefly to raise funds for buying off the enemy. After the overthrow of Tipū Sultān, during the eleven years of Pūrnaiya's administration (1800–10), the highest land revenue was equivalent to 94 lakhs in 1809, and the average was 83 lakhs. During the twenty-one years of the Rājā's administration which followed (1811–31), the highest was 90 lakhs, and the average 79 lakhs. In the first year of British administration (1831–2), the land revenue was set down as 48 lakhs, but included in this were 83 different cesses, besides 198 taxes unconnected with it. The general average assessment was usually one-third of the gross produce. In 1881–2 the total revenue was 107 lakhs, of which the land revenue amounted to 71 lakhs. In 1903–4 the total revenue had risen to 214 lakhs, and the land revenue to 98 lakhs.

Miscellaneous revenue. Excise. The two principal sources of excise revenue are toddy and arrack. The former, drawn from the date-palm, and also from coco-nut, palmyra, and *bagni* palms, is the immemorial beverage of the agricultural classes, a mild and comparatively innocuous drink, its average alcoholic strength being 2½ per cent. Arrack, which is far stronger and more harmful, is chiefly consumed by industrial labourers, and has an average alcoholic strength of 39½ per cent. The consumption of toddy is fairly stationary, while that of arrack has a decided tendency to increase year by year. **Toddy.** Formerly the right to sell toddy was farmed out by Districts, and was virtually a monopoly in the hands of a few contractors, between whom and the Darbār was a large class of middlemen. Want of proper control not only led to the supply of inferior liquor, but threatened the destruction of the date groves themselves. The new system broke up each *tāluk* into convenient farms, which supplied a certain number of shops from particular groves. The number of toddy shops remained the same, so that the increase of revenue was entirely due to the abolition of needless intermediaries. **Arrack.** As regards arrack, the policy has been to enhance the duty gradually up to the highest point consistent with the prevention of illicit distillation or contraband importation. In addition to this, the main causes which have tended to increase the revenue have been—the abolition in 1884 of all outlying distilleries and the

concentration of manufacture in one distillery near Bangalore under centralized control; and further, the separation in 1892 of the business of manufacture from that of distribution, and the adoption of a system for the sale of the privilege of retail vend. These measures led to the manufacture being taken up by European firms with large capital and superior technical resources, thus reducing the cost. Supplies were conveyed under separate contract to bonded dépôts in the Districts. In 1897 the still-head duty was raised to Rs. 4-12-0, and the retail rate to Rs. 6-6-0, per gallon, for liquor 20° under proof. The sale of the right of vend, on the 'separate shop system' in the cities and Gold Fields, and on the 'vend rent system' in *tāluks* or circles of villages, has secured to the State what previously formed the profits of middlemen. In 1898 a tree tax was introduced, for better regulating the consumption of toddy and conserving the date groves, the rate being Rs. 1-1-0 per tree per annum for date-trees, and corresponding rates for other palms. In 1901 a tree rent of 4 annas per tree per annum was levied on trees tapped for toddy. In 1903-4 there were 12 toddy dépôts and 3,837 retail shops, 962 of these being for the sale of *bagni* toddy. The number of trees tapped was 422,855, and the quantity of toddy consumed was 9,809,640 gallons. Retail shops for the sale of arrack numbered 931. The issue of spirits from the distillery amounted to 43,482 gallons. The greatest consumption is, of course, in the cities and the Gold Fields. The other sources of excise revenue are country beer, foreign liquors, hemp drugs (*gānja* and *mājum*), and opium. In 1899 the proportion of alcohol in country beer was fixed so as not to exceed 8 per cent. by volume. A scale of licence fees for the sale of foreign liquors was also prescribed. Country-made foreign spirits of weaker strength were introduced in 1904 to meet the requirements of the people, who were found in their absence to have recourse to inferior foreign stuff. *Gānja* is grown by contractors under departmental supervision in specified localities. There were 237 retail shops in 1903-4 for the sale of *gānja* and *mājum*, and 15,594 seers were sold. Opium, previously imported from Mālwā, has since 1903 been obtained from the Madras storehouse. There were 126 shops in 1903-4 licensed to sell opium, and 1,438 seers were consumed.

Foreign liquors.

Gānja.

Opium.

Local and municipal.

Up to 1901 there were ten Local fund circles, one for each of the eight Districts, and for the French Rocks and the Kolār Gold Fields. Two years later a new system was introduced, and a District board has been constituted for each District (in addition to the Kolār Gold Fields Sanitary Board), besides

a *tāluk* board for each *tāluk* or sub-*tāluk*. In 1904 these boards consisted of 1,188 members, of whom 372 were appointed *ex officio*, and 816 were non-official. *Tāluk* boards (since 1905) consist of 15 members: namely, 5 official, 5 elected, and 5 appointed by the State. District boards consist of 25 members: namely, one non-official elected for each *tāluk* of the District by the members of the *tāluk* board from their own body, and the rest *ex officio* or appointed by the State. The members hold office ordinarily for three years. Their functions embrace the construction and maintenance of roads and bridges, with assistance of the Public Works department if required, improving and conserving the water-supply, the provision and up-keep of travellers' bungalows and *musāfirkhānas* (native resthouses), dispensaries, sanitation of villages, &c. Funds are obtained by a cess of one anna in the rupee on land revenue, and on revenue from excise, *sayer*, and forests.

INCOME AND EXPENDITURE OF DISTRICT BOARDS

Particulars.	Average for ten years 1891-1900.	1900-1.	1903-4.
Income from	Rs.	Rs.	Rs.
Land revenue*	5,02,409	5,22,591	5,22,639
Provincial rates	...	10,803	† 1,66,356
Interest	...	...	275
Miscellaneous	36,592	37,249	2,905
Public works	3,426	1,924	10,644
Pounds	41,200	31,782	34,220
Ferries	8,605	5,845	19,388
Total income	5,92,232	6,10,194	7,56,427
Expenditure on			
Refunds	692	224	17,692
General administration . .	22,531	31,407	52,408
Education	4,210	7,023	...
Medical	58,904	74,049	47,017
Miscellaneous	20,400	13,818	30,794
Public works	5,17,045	4,58,914	5,22,294
Total expenditure	6,23,782	5,85,435	6,70,205

* This item represents 76 per cent. of local cesses.
† Includes 1·12 lakhs special contributions from Local funds for plague and other establishments, and balances transferred from municipalities converted into Unions.

In 1901 the number of municipalities was 124 (exclusive of the Civil and Military Station of Bangalore), of which 117 had a population under 10,000, and 7 a population of from 10,000 to 100,000. In 1904, of the minor municipalities, 36, which were not *tāluk* head-quarters and had a population of less than

3,000, were converted into Unions, a *panchāyat* being appointed for each Union. A *panchāyat* consists of 5 to 12 members, appointed by the State. The 88 municipalities in 1904 had 1,049 members, of whom 285 were officials. All of the members are natives except about 20 Europeans.

The Kolār Gold Fields Sanitary Board was constituted in September, 1899, with 3 *ex officio* members, and 4 non-official members nominated by the Mining Board. Its jurisdiction extends over the Kolār Gold Fields Sanitary Circle, embracing the Gold Fields and many of the surrounding villages. It deals with disposal of refuse, water-supply, prevention of overcrowding, drains and latrines, keeping and slaughter of live-stock, &c., burial and burning-grounds, prevention and treatment of infectious and contagious diseases, and underground sanitation of the mines.

The municipal commission of the Civil and Military Station of Bangalore has included, since 1904, a president, a medical officer, and 24 other members, 6 appointed by the Resident, and 18 elected, the former holding office for three years, and the latter for two. The Trades Association elect one member, Europeans and Eurasians 6, Muhammadans 3, and Hindus and others 8.

INCOME AND EXPENDITURE OF MUNICIPALITIES

	Average for ten years 1891–1900.	1900–1.	1903–4.
	Rs.	Rs.	Rs.
Octroi	1,56,298	2,48,426	2,19,038
Tax on houses and lands	1,29,997	1,63,962	1,83,879
Other taxes	2,881	1,217	1,32,917
Rents	18,832	24,507	30,277
Loans	36,463	33,026	1,03,464
Other sources	3,05,900	3,08,024	1,81,033
Total income	6,50,371	7,79,162	8,50,608
Expenditure on administration and collection of taxes	53,756	70,292	65,397
Public safety *	3,254	...	759
Water-supply and drainage	23,014	27,298	54,747
Conservancy	1,34,510	1,79,641	1,80,901
Hospitals and dispensaries	41,315	53,452	26,027
Public works	2,17,463	1,68,905	2,56,172
Education	38,044	38,451	39,146
Other heads	1,30,941	2,25,301	3,34,666
Total expenditure	6,42,297	7,63,340	9,57,815

* Police not charged to municipalities.

The Public Works department is controlled by a Chief Engineer, a Deputy-Chief Engineer, and two Superintending Engineers, who are in charge respectively of the Eastern and Western Circles. These are Royal Engineers or European officers. Separate branches have been formed for roads and buildings, and for irrigation. The executive staff are, with few exceptions, natives, trained in Indian Engineering Colleges. Local works on a large scale, which require professional skill, are carried out by the Public Works department on requisition from other departments, by which the needed funds are placed at their disposal. Public works.

Of original works carried out by the department only a few can be mentioned. The railways include the line from Bangalore to Mysore and Nanjangūd south-westwards, to Gubbi westwards, to Hindupur northwards, and the Kolār Gold Fields and Birūr-Shimoga branches. The irrigation works include the Srīrāmadevar anicut and channels, and others in Mysore and Hassan Districts, the great Māri Kanave, Bora Kanave, Srinivāsa Sāgara, and many more. The excellent system of roads through the formerly impassable mountainous parts of Kadūr District, and the fine *ghāt* roads through passes to the west coast, deserve special mention. With these should be named the great bridges over the Tungabhadra at Harihar, over the Hemāvati at Sakleshpur, and the bridges at Belūr, Bāle Honnur, Tippur, Tadas, and other places over broad rivers. Of hospitals the most important are the Bowring and Lady Curzon in the Civil and Military Station of Bangalore, and the Victoria in the city. Other buildings include the public offices at Bangalore, the Palace, the Residency, the Central College, and Mayo Hall, the new Palace at Mysore, with the public offices there, the Mahārājā's College, &c., and at Seringapatam the restoration of the Daryā Daulat.

Municipal and other water-supply schemes are represented by the Hesarghatta tank, the source of the Bangalore water-supply; the filling up of Pūrnaiya's Nullah at Mysore and the carrying out of the Kukarhalli and other water-works there; the provision at Betmangala for the water-supply of the Kolār Gold Fields, and minor works of that nature in various towns. The transmission of electric power from the Cauvery Falls to the Kolār Gold Fields having been successfully accomplished, electric lighting from the same source has been introduced into Bangalore and is being carried out at Mysore. Large extensions have been laid out and occupied in Bangalore and

Mysore, with a new town at the Gold Fields, all on the most modern principles.

Army. The total strength of the British and Native army stationed within Mysore on June 1, 1903, was as follows: British, 2,093; Native, 2,996; total, 5,089. The Mysore State forms for military purposes part of the Ninth (Secunderābād) Division, which is for the present directly under the Commander-in-Chief. It has a cavalry and an infantry brigade, as well as Artillery. The only military station is Bangalore, which is also the head-quarters of a volunteer rifle corps. The total volunteer strength within Mysore, including detachments of railway volunteers, was 1,512 in 1903. The Coorg and Mysore Rifles also have detachments at Chikmugalūr and Sakleshpur in the planting districts to the west.

The Mysore State force had a sanctioned strength of 2,722 in 1904, of whom nearly a half were Muhammadans and a fifth Marāthās, the rest being Hindus and Christians in about equal numbers. The force is composed of two regiments of Silladār cavalry, and three battalions of Barr infantry. In 1903 the former were 1,072 strong, and the latter 1,814. The Imperial Service Lancers, raised in April, 1892, form one cavalry regiment, stationed in Bangalore, and with them is kept up a transport corps of 300 ponies. The Local Service Cavalry regiment is stationed at Mysore. The Barr battalions have their head-quarters at Mysore, Shimoga, and Bangalore, with detachments in out-stations. The State military expenditure was 7·9 lakhs in 1880–1, 6·1 lakhs in 1890–1, and 9·4 lakhs in 1903–4.

Police. The police are under an Inspector-General. The sanctioned strength of the regular force in 1904 was 882 officers and 5,045 men, or one policeman to every 5·83 square miles and 1,073 inhabitants. The village police were for the first time provided with uniform and arms in 1901–2. They help the regular police in the prevention and detection of crime, and in reporting the arrival and departure of criminal gangs and suspicious-looking strangers. The system of night watch is regularly maintained in all the villages of the Maidān tracts. The watching by *totis* and *talāris* in *ookkads* and outposts on important roads and jungle tracts has worked well. There is a Police Training School, where recruits and officers and men are taught drill, codes, and surveying and drawing. But the police service is not as a rule popular with the educated classes of natives. Finger-prints and anthropometry have been used to trace criminals in recent years.

The special reserve is a body selected for good physique, and is better paid, equipped, and drilled than the other police. The members go through a course of musketry, and are held ready for emergencies in any part of the country, and are employed in putting down organized dacoities and serious disturbances of the public peace. There are three detachments, stationed respectively at Bangalore, Mysore, and Shimoga.

The Kolār Gold Fields Police is a special body, with 50 officers and 279 men, under a separate European Superintendent, and is largely composed of Sikhs and Punjābis recruited from the north of India. It was formed in April, 1900, and has jurisdiction over the Bowringpet, Mālūr, and Mulbāgal *tāluks*.

The troops aid the police in various ways; detachments of the Local Service Cavalry patrol certain roads, while the infantry act as treasury guards and escorts. The Railway Police, reckoned as in British service, are under the Superintendent of Police of the Civil and Military Station of Bangalore, subject to the orders of the Resident.

The following are statistics of cognizable crime, the figures being the average for the five years ending 1901: Number of cases reported, 3,221; number decided in criminal courts, 1,828; number ending in acquittal or discharge, 584; number ending in conviction, 1,244.

POLICE STATISTICS

	1881.	1891.	1901.	1904.
Supervising Staff.				
District and Assistant Superintendents	1	12	12	13
Inspectors	5	14	18	102
Subordinate Staff.				
Sub-inspectors	352	465	843	13 *
Head constables	22	...	...	753 *
Constables	3,676	4,684	5,034	5,045
Municipal police	978	449	...	526
Total expenditure Rs.	4,55,000	6,61,000	9,05,000	9,78,000

* The designations are chief constables (13), head constables, *jamadārs*, *dafadārs*, and sergeants (753).

Convicts are employed in cleaning and grinding *rāgi*; on prison duties, as prison warders, servants, and gardeners; on the preparation of articles for use or consumption in the jails; on jail buildings, manufactures, and public works. The chief industries are printing, carpet, tent, and blanket-making, cloth-weaving, gunny and coir work, carpenter's and blacksmith's Jails.

work in the Central jail at Bangalore; and weaving and spinning, basket and mat-making, and pottery in the Mysore jail. The most numerous admissions into hospital on account of sickness are for malarial fevers. The high mortality in 1881 shown below was due to dysentery or diarrhoea, and anaemia; in 1901 there were four deaths from cholera.

JAIL STATISTICS

	1881.	1891.	1901.	1904.
Number of Central jails . .	1	1	1	1
" District jails .	8	2	2	1
" Subsidiary jails (lock-ups) . .	81	78	78	77
Average daily jail population:				
(*a*) Males—In Central jails .	786	424	669	872
In other jails .	1,104	459	493	131
(*b*) Females—In Central jails	41	44	32	43
In other jails	45	17	20	8
Total	1,976	944	1,214	1,054
Rate of jail mortality per 1,000	20·6	13	19·74	17·08
Expenditure on jail maintenance . . . . Rs.	1,59,000	89,000	1,12,000	88,741
Cost per prisoner . . Rs.	77-6-2	94-11-10	92-5-4	84-11-6
Profits on jail manufactures Rs.	12,194	15,900	18,738	36,230
Earnings per prisoner . Rs.	6-6-5	19-7-9	18-8-8	42-8-0

Education.

Highly as learning was always esteemed, education seems never under former native rulers to have been regarded as a duty of the State. It was left to the voluntary principle, and was mostly in the hands of the priests. At the same time we find that, in the primitive corporation of the 'village twelve,' a poet, who was also a schoolmaster, was sometimes provided instead of a goldsmith. Endowments were often given for promoting learning as a religious duty.

Education on modern lines was first introduced by European missionaries. In 1826 a Mysore Mission College was proposed for Bangalore by the London Mission, conducted by a staff of European professors, aided by learned *pandits*, and designed to attract students from all parts of India. But their home authorities were not prepared to carry it out. Between 1840 and 1854 the Wesleyans established schools at some of the District head-quarters with aid from Government, the principal being their institution at Bangalore, founded in 1851. At Mysore the Mahārājā maintained an English free school. The State expenditure on education in 1855 was Rs. 16,500 a year.

The Educational department was formed in 1857, and in

1858 a high school affiliated to the Madras University was established at Bangalore, converted in 1875 into the Central College. The Wesleyan schools in the Districts were taken over by Government, and vernacular schools gradually established in the *tāluks*. In 1861 a normal school, and in 1862 an Engineering school, were attached to the high school at Bangalore. In 1868 the *hobli* school system, for extending primary education among the masses, was introduced, and greatly added to the operations of the department. The schools were to be supported by a local cess; but in 1872 the proportion of 24 per cent. of Local funds was allotted as the village school fund, raised in 1903 to 33 per cent.

The famine of 1876–8 had a disastrous effect on all public undertakings. Education, which had greatly flourished, both public and private, was starved for want of funds. The normal schools were closed, the European Inspectors were dispensed with, the Director of Public Instruction was placed in charge of the Census and the Police in addition to Education, and later on of Archaeology instead of Police, all the cost of vernacular schools was thrown on Local funds, and rigid economy stood in the way of any expansion. In 1884 a revision was made of the higher institutions, but it was not till 1890 that a freer expenditure enabled progressive measures to be adopted. In 1887 the Mysore local examinations were instituted for teachers and pupils of vernacular schools, giving a definite aim to the courses of study. At the end of 1888 education in the Civil and Military Station of Bangalore was transferred to the Madras Educational department. In 1889 the cost of the *tāluk* vernacular schools was again made a charge on State funds, thus relieving the village school fund. In 1891 the number of native Deputy-Inspectors was doubled. The department is now controlled by an Inspector-General of Education, whose head-quarters were removed to Mysore in 1894 but again established at Bangalore in 1899. The State was divided in 1903 into two portions for control and inspection, between the Inspector-General and his Assistant. The former retains the eastern Districts, with head-quarters at Bangalore, and the latter has charge of the western Districts, with head-quarters at Mysore. The only Europeans recruited from England are the heads of the colleges at Bangalore and Mysore. The inspecting staff was further strengthened in 1905.

Of the colleges affiliated to the Madras University, those of the first grade are the Central College at Bangalore and the Mahārājā's College at Mysore. The former takes mathe- University education.

matics and physical science as the optional subjects for the B.A. degree, and the latter mathematics and history. The second-grade colleges are the St. Joseph's College at Bangalore, the Mahārānī's College at Mysore, and the Sacred Heart College attached to the Convent of the Good Shepherd at Bangalore. This last and St. Joseph's are aided from the revenues of the Assigned Tract, and the others are supported by the State. The first-grade colleges are provided with hostels. There are also Sanskrit colleges of a high standard at Mysore, Bangalore, and Melukote, the two latter being aided. Bangalore has, moreover, been selected as the site of the Indian Institute of Research for post-graduate study, to be founded on Mr. Tata's endowment.

UNIVERSITY RESULTS

Passes in	1881.	1891.	1901.	1904.
Matriculation	75	194	156	125
First or Intermediate in Arts or Science	28	57	59	68
Ordinary Bachelor's degree	4	35 *	96 *	131 *
Higher and special degrees	1	...	...	2

* These figures show the passes in any one branch of the three which qualify for the full degree.

Secondary education (boys).

Secondary schools include high schools and middle schools. The former have the matriculation examination as their goal, while the latter prepare for the lower secondary examinations, the course being partly English and partly vernacular. In 1904 there were 202 State, 3 municipal, 55 aided, and 3 unaided schools, the last being middle schools. The amount of aid to private schools is based on their private expenditure, and their efficiency as tested by the reports of Inspectors and results of public examinations. The proportion of the male population of school-going age under secondary instruction in 1904 was 2 per cent.

Primary education (boys).

The primary stages are divided into upper and lower, the latter ending with the ability to read from printed books. In 1904 there were 1,593 State, 285 aided, and 14 unaided primary schools. As to the qualifications of the teachers, out of 3,179 in State employ, 149 hold a normal school or teacher's certificate, others have passed various examinations, including 154 who have passed the University matriculation or higher tests, leaving 1,002 who have not passed any. The minimum pay of the village schoolmasters was raised from

Rs. 5 to Rs. 7 a month in 1901, but better prospects are needed for their future. With a view to providing funds for this purpose, the levy of fees has been introduced in all village schools, except in the lower primary classes, and the former rates of fees in other schools have been raised all round. For the benefit of children of artisans and agriculturists above 15, night schools have been opened, of which there are 67, with 1,500 pupils, most of them in the east, but some in all Districts. There are local committees for the control of all *hobli* and village schools.

Female education.

The first girls' schools were established by European missionary ladies at Bangalore in 1840. Mission girls' schools were opened later in some of the large towns. In 1868 the Government began with one in Bangalore, and as years went on the number increased all over the country. The *hobli* schools established in 1868 received both boys and girls together. Owing to the early marriage system, which did not admit of girls staying beyond the age of ten, and the entire want of female teachers, the girls' schools were really infant schools. But the mission schools had an advantage in both respects, being able to keep their girls longer, and to provide native Christian women as teachers.

One of the steps that gave an impetus to public female education was the establishment at Mysore of the Mahārānī's Girls' School in 1881. This was confined to high-caste girls, and, with an unstinted expenditure, gave a free education. Its influential patronage overcame all objections, and it presented an acceptable compromise between Western methods and Eastern views as to the appropriate subjects of female education. It has for some years had Lady Superintendents from Girton or Newnham, and in 1902 was formed into a college, affiliated to the Madras University. Two Brāhman students took the B.A. degree in 1906. Admission is also now allowed of Christians and girls of low castes, provided they are of respectable family and approved by the management. By liberal scholarships girls have been induced to stay longer at school, and female teachers have been trained from among young widows, of whom there are at present ten adult and fourteen child-widows. The management is in the hands of a committee, and local committees have been appointed for girls' schools in other parts of the country. These are, however, reported to take little interest in the matter as a rule.

In 1881, 1891, and 1901 respectively there were 46, 113,

and 230 girls' colleges and schools, the percentage of girls under instruction to the female population of school-going age being 0·81, 3·14, and 4·22. In 1904 there were 243 schools, and the proportion was 4 per cent. The State funds contributed $1\frac{1}{4}$ lakhs (of which Rs. 38,000 was for the Mahārānī's College), and Local and municipal funds Rs. 6,800, to female education in 1903–4. The high school classes learn English as a first language. In the highest class of the middle school English is begun as a second language. Zanāna teaching is carried on by ladies of the Church of England Zanāna Mission in Bangalore, Mysore, and Channapatna, chiefly among Musalmān families.

Special schools.

There are State normal schools at Mysore, Kolār, and Shimoga, for training teachers; also a training department in the Mahārānī's College. State Industrial schools are at work in Mysore and Hassan, mission Industrial schools at Tumkūr and Kolār, with one for girls at Hassan, and a private Industrial school at Melukote. The Industrial school at Mysore has recently been reorganized[1] and placed under an experienced Superintendent, who also inspects the other Industrial schools in the State. An Engineering school has been established at Mysore, for training subordinates for the Public Works department. Weaving schools have been opened at Hole-Narsipur, Dod-Ballāpur, Chiknāyakanhalli, and Molakālmuru, with carpentry and drawing classes attached. There are altogether eighteen Industrial schools, of which six are weaving schools. A school has been established at Channapatna for the revival of the decaying local industries of lacquer-work, and the preparation of steel wire for the strings of musical instruments. Commercial classes are conducted at Bangalore by certain officials, and receive aid from Government. Students are attached to the laboratories of the Agricultural Chemist, the State Geologist, and the State Bacteriologist, and also to the silk farm established by Mr. Tata, and to the workshops of the Southern Mahratta Railway. Those at the silk farm are village schoolmasters, of whom five are trained annually, and then appointed as inspectors of sericulture. State scholarships are given to students from Mysore learning electricity at New York, forestry at Oxford, and in the Teachers', Engineering, Medical, and Veterinary colleges of Madras or Bombay, in the Victoria Jubilee Institute and schools of Art at those places,

[1] The Prince of Wales, on his recent visit to Mysore, laid the foundation stone of new buildings for it, to be called the Chāmarājendra Industrial Institute.

and in the Forest School at Dehra Dūn. One-fifth of the income from the Dāmodar Dās Charity Fund, yielding about Rs. 20,000 a year, has been assigned for scholarships to Gujarātī students selected by a committee—nine to those studying for the Bombay University examinations, one for a student of engineering or agriculture, and one for medicine. The remaining four-fifths are intended for post-graduate scholarships. One has been granted to a student for the history and economics tripos at Cambridge, and one to a student for the M.B. and C.M. course at Edinburgh, with a special view to practical microscope work. An institution of a special nature deserving of notice is the school for deaf-mutes and the blind at Mysore, managed by a committee.

European and Eurasian education. Most of the institutions for Europeans and Eurasians are in the Civil and Military Station of Bangalore, but the returns do not include regimental schools under the Army department. The number of pupils in the public schools was 1,314 in 1904. In the rest of the State there were 361, the majority being at the Urigam school on the Kolār Gold Fields. St. Joseph's College did well in the First Arts and matriculation. One European girl has passed the B.A. degree examination in English and French, and two the F.A. from the Sacred Heart and the Central College. The popular callings for young men are in the railway and telegraph departments, and the engineering and medical professions. Girls become nurses and governesses.

Muhammadan education. The number of Muhammadan pupils in all schools was 4,330 in 1881, 10,185 in 1891, 14,612 in 1901, and 13,383 (10,454 boys and 2,929 girls) in 1904. Six passed certain branches of the B.A. examination, one the First Arts, and one the matriculation. Only half-fees are levied from Muhammadan boys in all schools, and girls are free. There are also twenty-six scholarships allotted for Muhammadan students in the Central College to encourage English education among them. Owing to the dearth of qualified teachers, the village Hindustāni schools are in a very poor condition. In 1904 there were 15 Muhammadans attending colleges, 3,581 in secondary schools, and 8,848 in primary schools. Some have received scholarships at the M.A.O. college at Alīgarh.

Education of aboriginal and depressed castes. An interesting effort has been made to introduce education among the Lambānis. In all, 12 schools have been opened for them—7 in Shimoga District, and the others in Tumkūr, Chitaldroog, and Hassan Districts. They were attended in 1904 by 235 boys and 10 girls. For the low castes or Pancha-

mās there are 70 schools, with 1,910 pupils, of whom 277 are girls.

Educational finance.

Expenditure on Educational Institutions maintained or aided by Public Funds in 1903-4

	Provincial funds.	District and municipal funds.	Fees.	Other sources.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.
Arts and professional colleges	1,34,105	596	7,433	2,244	1,44,378
Training and special schools	32,536	28,529	2,913	33,334	97,312
Secondary boys' schools	1,86,249	51,098	80,108	22,656	3,40,111
Primary boys' schools	29,281	1,71,167	4,680	10,721	2,15,849
Girls' schools	1,03,529	6,808	858	38,027	1,49,222
Total	4,85,700	2,58,198	95,992	1,06,982	9,46,872

Colleges, Schools, and Scholars

Institutions.	1880-1.			1900-1.			1903-4.		
	No.	Scholars.		No.	Scholars.		No.	Scholars.	
		Male.	Female.		Male.	Female.		Male.	Female.
Public.									
Arts colleges	3	129	..	8	504	12	8	546	5
Secondary schools— Upper (High)	16	533	..	14	3,160	10	14	2,651	22
Lower (Middle)	129	2,292	47	223	21,333	2,838	249	19,212	3,899
Primary schools	869	36,656	2,485	1,946	52,118	13,375	1,892	47,496	12,015
Training schools	9	974	..	5	158	5	4	147	11
Other special schools	1	..	..	48	1,380	98	55	1,670	120
Private.									
Advanced	..	..	..	12	224	24	9	188	16
Elementary	..	..	..	1,753	20,770	459	1,567	17,965	313
Total	1,027	40,584	2,532	4,009	99,647	16,821	3,798	89,875	16,401

General educational results.

The proportion of the population of school-going age under instruction was 11 in 1881, 9 in 1891, 14 in 1901, and 13 in 1904. At the Census of 1901 the proportion of the population able to read and write was 5·06 per cent., being 9·27 per cent. for males, and 0·77 for females. The cities and the Gold Fields have the highest percentage; and of the Districts, Kadūr stands highest and Mysore lowest. Shimoga, next to Kadūr, has the highest percentage of literate males, and Tumkūr of literate females. The scale of fees in State colleges and schools was raised in 1904 to the following monthly rates: Village schools, lower primary, free; upper, 1 anna; middle,

2 annas. *Tāluk* schools, lower primary, 2 annas; upper, 3 annas; middle, 4 annas. English middle schools, 8 annas, 12 annas, R. 1, Rs. 1–4–0, and Rs. 1–8–0, according to class. English high schools, Rs. 2 and Rs. 2–8–0; F.A. class, Rs. 4; B.A. class, Rs. 5.

Among the oldest newspapers in the vernacular were the *Kāsim-ul-Akhbār* in Hindustāni, started in 1863, and still published; and the *Karnātaka Prakāsika* in Kanarese, begun in 1865 but discontinued at the end of 1898, the editor and proprietor having fallen an early victim to plague. News-papers.

The number of newspapers and periodicals published in the State in 1901 was 11 in English, 7 in the vernaculars, and 3 in both English and vernacular. A third of the whole treat of politics. There are five English papers with a circulation of from 200 to 500, the principal being the *Daily Post* (Bangalore). All these give general news. Of the Kanarese papers, the Wesleyan *Vrittānta Patrika* (Mysore weekly) and *Mahilā-sakhi* for women (Mysore monthly) have considerable circulations. Their *Harvest Field* (Mysore monthly) in English is also popular. The *Nadegannadi* (Bangalore), *Sūryodaya* (Bangalore), *Vrittānta Chintāmani* (Mysore), are Kanarese weeklies, with circulations varying from 1,000 to 500, and give general and political news. In Hindustāni are the *Kāsim-ul-Akhbār* (bi-weekly), and the *Edward Gazette*, an old paper under a new name (weekly), both published in Bangalore, and treating of general and political news. The Tamil paper is the *Tāraka* (Bangalore bi-weekly), with a circulation of 200. Of the Kanarese monthly periodicals, *Vidyādāyini* is a journal of education. *Karnātaka Granthamālā* publishes new works, and *Karnātaka Kāvyakalānidhi* prints old unpublished works. All these are issued in Mysore.

The number of books registered in 1901 was 30, exclusive of official publications, such as the volumes of inscriptions issued by the Archaeological department. There were 3 in English, 23 in Kanarese, 1 in Telugu, and 3 in Sanskrit and Kanarese. The subjects chiefly treated of come under the heads of religion, fiction, and history. The principal original works were four, of which two were based on the Rāmāyana story, one was an allegory on virtue and vice, and the other was a composition by a wife of the Mahārājā who died in 1868, on the reputed marriage of a Musalmān princess of Delhi to Cheluvarāya or Krishna, the god at Melukote, said to have taken place in the thirteenth century. Books and registered publications.

The Victoria (opened 1900) in Bangalore City, the Bowring Medical.

in the Civil and Military Station, and the General Hospitals at Mysore and Shimoga, are first-class hospitals. Before the Victoria was opened, St. Martha's Hospital, founded by the Lady Superior of the Convent of the Good Shepherd, took the place of a civil hospital for Bangalore City. Second-class hospitals exist at the District head-quarters, and Local fund dispensaries at all *tāluk* head-quarters and large towns. A Medical School was established in 1882 for training subordinates, but was given up in 1886 in favour of paying students to attend the large and well-equipped Medical Colleges at Madras and Bombay. A local medical service was organized in 1884 and improved in 1897.

For women and children there are the Mahārāni's Hospital at Mysore, the Maternity at Bangalore, the Lady Curzon in connexion with the Bowring, and the Gosha Hospital of the Zanāna Mission. Native midwives are supplied to all the *tāluks*, who have been trained in the Lying-in Hospital at Madras, or in classes at the hospitals in Bangalore and Mysore.

There is a Lunatic Asylum at Bangalore, in which at the end of 1903 there were 228 male and 86 female patients. During the year 24 were discharged as cured, and 11 as improved, while 23 died. The lunatics are employed in weaving cloth and *kamblis*, spinning, and gardening. In the Leper Asylum there were 11 male and 6 female lepers.

For vaccination there are 96 *tāluk* and 9 municipal vaccinators, besides the medical subordinates, and supervision is exercised by 9 inspectors. Vaccination is compulsory among State servants and school children[1]. Owing to the difficulties in the way of procuring good infant lymph for vaccination, a Vaccine Institute was established at Bangalore in 1892 for preparing lymph from the calf, in lanoline.

In 1896 an Eye Infirmary was established, and in 1899 a well-equipped Bacteriological Institute. Quinine was sold in 1904 in 3,426 packets, containing 102 powders of five grains each, at 418 post offices. The dose was raised in 1905 to seven grains, and it is proposed to sell through the village officials as well.

Sanitation has received special attention in the towns; but in villages only the improvement and conservancy of the water-supply have been looked to, and the removal of manure pits from the immediate proximity of the dwellings insisted

[1] A Regulation passed in 1906 makes vaccination compulsory throughout 'notified areas.'

upon. The peremptory evacuation of villages on the occurrence of plague has inclined the people in some parts to build and permanently remain on the spots in their fields where they have been camped.

MEDICAL STATISTICS.

	1881.	1891.	1901.	1904.
Hospitals, &c.				
Number of civil hospitals and dispensaries	24	99	134	135
Average daily number of—				
(*a*) In-patients	199.87	177.14	422.39	690.05
(*b*) Out-patients	1,463.92	3,740.41	6,412.17	5,985.75
Income from—				
(*a*) Government payments Rs.	62,257	87,625	2,74,389	3,57,507
(*b*) Local and municipal payments Rs.	5,556	40,642	52,568	55,862
(*c*) Fees, endowments and other sources	...	...	148	662
Expenditure on—				
(*a*) Establishments Rs.	41,741	86,415	2,18,122	2,47,842
(*b*) Medicines, diet, buildings, &c. Rs.	27,072	41,852	1,08,983	1,66,199
Lunatic Asylums.				
Number of asylums	1	1	1	1
Average daily number of—				
(*a*) Criminal lunatics	8.93	24.19	40.43	40.15
(*b*) Other lunatics	131.07	160.81	217.57	237.80
Income from—				
(*a*) Government payments Rs.	...		...	25,590
(*b*) Fees and other sources Rs.	...	24	134	317
Expenditure on—				
(*a*) Establishment Rs.	15,831	4,986	6,074	4,786
(*b*) Diet, buildings, &c. Rs.	...	11,795	21,148	21,121
Vaccination.				
Number of successful operations	79,375	90,075	66,183	60,731
Total expenditure on vaccination Rs.	10,998	24,381	20,822	21,109
Cost per successful case Rs.	0-1-9	0-4-8	0-5-1	0-7-8

NOTE.—The figures do not include the Civil and Military Station of Bangalore The drop in vaccination in 1901 is the effect of plague.

The topographical survey of the State was completed in 1886. The revenue survey was commenced in 1863 and the settlement brought to an end in 1901. The system followed is that of Bombay, as already explained (p. 60, above). The area surveyed includes the whole of the State, or 29,433 square miles. The maintenance of the survey records is also the duty of the Survey department. Surveys.

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In the Bombay Presidency.

Ghāts, Western.—A range of mountains about 1,000 miles in length, forming the western boundary of the Deccan and the watershed between the rivers of Peninsular India. The Sanskrit name is Sahyādri. The range, which will be treated here with reference to its course through Bombay, Mysore and Coorg, and Madras, may be said to begin at the Kundaibāri pass in the south-western corner of the Khāndesh District of the Bombay Presidency, though the hills that run eastward from the pass to Chimtāna, and overlook the lower Tāpti valley, belong to the same system. From Kundaibāri (21° 6′ N. and 74° 11′ E.) the chain runs southward with an average elevation which seldom exceeds 4,000 feet, in a line roughly parallel with the coast, from which its distance varies from 20 to 65 miles. For about 100 miles, up to a point near Trimbak, its direction is somewhat west of south; and it is flanked on the west by the thickly wooded and unhealthy tableland of Peint, Mokhāda, and Jawhār (1,500 feet), which forms a step and a barrier between the Konkan lowlands and the plateau of the Deccan (about 2,000 feet). South of Trimbak the scarp of the western face is more abrupt; and for 40 miles, as far as the Mālsej pass, the trend is south-by-east, changing to south-by-west from Mālsej to Khandāla and Vāgjai (60 miles), and again to south-by-east from here until the chain passes out of the Bombay Presidency into Mysore near Gersoppa (14° 10′ N. and 74° 50′ E.). On the eastern side the Ghāts throw out many spurs or lateral ranges that run from west to east, and divide from one another the valleys of the Godāvari, Bhīma, and Kistna river systems. The chief of these cross-ranges are the SĀTMĀLAS, between the Tāpti and Godāvari valleys; the two ranges that break off from the main chain near Harischandragarh and run south-eastwards into the Nizām's Dominions, enclosing the triangular plateau on which Ahmadnagar stands, and which is the watershed between the Godāvari and the Bhīma; and the Mahādeo range, that runs eastward and southward from Kamālgarh and passes into the barren uplands of Atpādi and Jath, forming the watershed

between the Bhīma and the Kistna systems. North of the latitude of Goa, the Bombay part of the range consists of eocene trap and basalt, often capped with laterite, while farther south are found such older rocks as gneiss and transitional sandstones. The flat-topped hills, often crowned with bare wall-like masses of basalt or laterite, are clothed on their lower slopes with jungles of teak and bamboo in the north; *jāmbul* (*Eugenia Jambolana*), *ain* (*Terminalia tomentosa*), and *nāna* (*Lagerstroemia parviflora*) in the centre; and teak, black-wood, and bamboo in the south.

On the main range and its spurs stand a hundred forts, many of which are famous in Marāthā history. From north to south the most notable points in the range are the Kundaibāri pass, a very ancient trade route between Broach and the Deccan; the twin forts of Sālher and Mulher guarding the Bābhulna pass; TRIMBAK at the source of the holy river Godāvari; the Thal pass by which the Bombay-Agra road and the northern branch of the Great Indian Peninsula Railway ascend the Ghāts; the Pimpri pass, a very old trade route south between Nāsik and Kalyān or Sopāra, guarded by the twin forts of Alang and Kulang; Kalsūbai (5,427 feet), the highest peak in the range; Harischandragarh (4,691 feet); the Nāna pass, a very old route between Junnar and the Konkan; Shivner, the fort of Junnar; Bhīmashankar, at the source of the Bhīma; Chākan, an old Musalmān stronghold; the Bhor or Khandāla pass, by which the Bombay-Poona road and the southern branch of the Great Indian Peninsula Railway enter the Deccan, and on or near which are the caves of Kondāne, Kārli, Bhāja, and Bedsa; the caves of Nādsur and Karsāmbla below the Vāgji pass; the forts of Sinhgarh and Purandhar in the spurs south of Poona; the fort of Raigarh in the Konkan, and of Pratāpgarh between the new Fitzgerald *ghāt* road and the old Pār pass; the hill station of MAHĀBALESHWAR (4,717 feet) at the source of the Kistna; the fort and town of Sātāra; the Kumbhārli pass leading to the old towns of Pātan and Karād; the Ambā pass, through which runs the road from Ratnāgiri to Kolhāpur; the forts of Vishalgarh and Panhāla; the Phonda pass, through which runs the road from Deogarh to Nipāni; the Amboli and the Rām passes, through which run two made roads from Vengurla to Belgaum; Castle Rock, below which passes the railway from Marmagao to Dhārwār; the Arbail pass on the road from Kārwār to Dhārwār; the Devīmane pass on the road from Kumta to Hubli; and the GERSOPPA FALLS on the river Sharāvatī.

across this part of the range have, however, been greatly improved of late years. Besides the Madras Railway already referred to, the line from Tinnevelly to Quilon now links up the two opposite shores of the Peninsula, and the range is also traversed by numerous *ghāt* roads. The most important of these latter are the Charmadi *ghāt* from Mangalore in South Kanara to Mudgiri in Mysore; the Sampāji *ghāt* between Mangalore and Mercāra, the capital of Coorg; the roads from Cannanore and Tellicherry, which lead to the Mysore plateau through the Perumbādi and Peria passes; and the two routes from Calicut to the Nīlgiri plateau up the Karkūr and Vayittiri-Gūdalūr *ghāts*.

Biligiri-rangan Hills.—A range in Southern India, which originates (12° 27′ N. and 76° 11′ E.) in the south-east of Mysore District, Mysore State, and after running north and south for nearly 10 miles, passes into the Coimbatore District of Madras. The peak from which the range is named is 5,091 feet high, with an old temple of Biligiri Ranga at the top. The slopes are well wooded, teak and sandal-wood being found among the trees; and long grass, often 10 to 18 feet high, grows everywhere. The only inhabitants are the wild aboriginal Sholagas, who live in isolated hamlets containing five or six wattled huts. Elephants, bison, and *sāmbar* are found, and occasional tigers, leopards, and bears.

Bābā Budan Mountains.—The highest range in Mysore State, lying between 13° 23′ and 13° 35′ N. and 75° 37′ and 75° 52′ E., in the middle of Kadūr District. The form of the range is that of a crescent or horseshoe, with the opening north-west, hence its appropriate Hindu name Chandra Drona or 'crater of the moon.' The northern arm, beginning with the Hebbe hill (4,385 feet), stretches eastwards without interruption for about 15 miles, and then, bending southwards, presents to the east an unbroken wall of more than 20 miles. The southern arm is formed by the Basavan-gudda and Woddin-gudda ranges. The character of the chain is that of a stupendous ridge, whose elevation is 6,000 feet above sea-level, and in some parts only a few yards wide at the summit, rising at intervals into loftier peaks. The higher portions consist of steep grassy slopes, well wooded in the ravines, through which flow perennial springs. The sides are densely clothed with forests, among which are numerous coffee plantations, while the Jāgar valley is one stretch of forest as far as the eye can see. The highest point is Mulainagiri (6,317 feet), towards the south of the range. Near to this, north-eastwards,

is Bābā-Budan-giri or Vāyu-parvata (6,214 feet), near which are the sources of the Veda and Avati rivers. The hollow which succeeds marks the shrine of the eponymous saint Bābā Budan. The conspicuous conical peak on the outer verge of the eastern face is Deviramman-gudda, where a beacon is lighted at the Dīpāvali festival. Near the north-east angle is Kalhatti-giri (6,155 feet), north of which a hot-season retreat has been established. These vast wilds and solitudes, with scarcely a human habitation, were formerly well stocked with game, from the elephant and bison downwards. The advance of the coffee-planter has now forced back wild animals to the remoter and more secluded spots. The Bābā-Budan-giri was the cradle of coffee cultivation in Southern India; and the slopes of the entire range, as well as the tract south of the forest-bound Jāgar valley, are now occupied by coffee gardens, both European and native. The first European garden was opened about 1840, to the south of Bābā-Budan-giri. Two roads run along the eastern face of the mountains, one over the summit and the other at a lower level. About midway in the latter is Santaveri, chiefly a colony of Lambānis, whence there is a road to Kalhatti at the top. On the north-east of the mountains are the Abbe falls of 600 feet. The name Bābā Budan is that of a Musalmān saint who took up his abode on the hill so called, and reared coffee from seeds he obtained at Mocha when on pilgrimage, thus introducing that important staple into India. A cave said to contain his tomb is in charge of a Musalmān *fakīr* at Attigundi, the only village on the hills, and is visited by pilgrims of both creeds. Hindus claim that the tomb is the throne of Dattātreya, whose appearance at the mouth of this cave will herald the final *avatār* of Vishnu and usher in the millennium.

Chitaldroog Hills.—A belt running from south to north through the middle of Chitaldroog District, Mysore State, lying between 13° 36′ and 14° 42′ N. and 76° 24′ and 76° 36′ E., a continuation of the Chiknāyakanhalli auriferous band. Jogimaradi, to the south of Chitaldroog, is a hot-season retreat, 3,803 feet high, and Chitaldroog itself is 3,229 feet above the sea. The latter is extensively fortified, the modern works dating from the time of Tipū Sultān, about 1782. The hills are in intermittent parallel chains, mostly bare and stony; but some of the lower ridges are covered with fine grass and produce trees of middling size.

Dattātreya.

Hirekal Gudda.—A group of hills in the Arsikere *tāluk* of Hassan District, Mysore State, lying between 13° 20′ and

$13°$ $28'$ N. and $76°$ $19°$ and $76°$ $23'$ E. At the southern end is the temple of Mālekal Tirupati. Conspicuous towards the north is Garudangiri (3,680 feet), crowned with a fort built by the Rājā of Mysore in 1660. In 1770 it was occupied for a time by the Marāthās, but reverted to Mysore.

Tungabhadra.—A river of Southern India, the chief tributary of the Kistna, which is fed by all the streams of the northern half of Mysore State. It is formed by the union of the twin rivers Tunga and Bhadra, which rise together in the Western Ghāts at Gangāmūla, on the frontier of Kadūr District, Mysore. The Tunga runs north-east to beyond Sringeri, and then takes a sharp turn north-west to Tīrthahalli, from where its course is again north-east past Shimoga. The Bhadra runs east to the western base of the Bābā Budan range, and then north past Benkipur. The two unite at Kūdali in the north of Shimoga District ($14°$ N. and $75°$ $43'$ E.). The united river forms the boundary between Mysore and Bombay, and then between Bombay and Madras. Turning north-east it forms the boundary between Madras and the Nizām's Dominions, and bending east in the north of Bellary District it joins the Kistna, beyond Kurnool, after a total course of about 400 miles. From Shimoga District the Tungabhadra receives the Choradi or Kumadvati and the Varadā on the west, and the Haridrā on the south. From Chitaldroog District it receives the Chinna Hagari and the Vedāvati or Hagari on the south.

The Tungabhadra is bridged for the trunk road at Harihar, where it is also crossed by the railway from Hubli to Bangalore; and again at Hosūru and Rāmpuram in Bellary District, where the lines from Hubli to Bellary and from Madras to Bombay pass over it.

There are thirty-eight small irrigation dams on the Tunga and the Bhadra in Mysore, but the bed of both rivers is for the most part rocky, and consequently unsuitable for navigation. The manner in which the country rises rapidly away from either side of the Tungabhadra has also hitherto prevented it from being greatly utilized for irrigation in either the Nizām's Dominions or the Madras Presidency, though in the former State its left bank is dammed for a distance of about 30 miles. The kings of the ancient dynasty of Vijayanagar (1336–1565), the ruins of which still stand on its bank near the little village of Hampi in Bellary District, threw across it, above and below their capital, a number of dams made of huge blocks of uncemented stone, of which ten are still used for watering narrow strips of land along the southern edge of the river. A

few miles above the point where the Tungabhadra falls into the Kistna a dam also turns part of the water into the KURNOOL-CUDDAPAH CANAL. The river is, however, perennial and comes down in frequent heavy freshes, which cannot be utilized by any of these works, and are not required for irrigation in the delta of the Kistna lower down. The Irrigation Commission of 1901–3 accordingly recommended the re-investigation of a project, which has been several times mooted in different shapes, for constructing a reservoir upon the river in Bellary District. It is calculated that a masonry dam about 145 feet long near Hospet, where the river cuts through some low hills, would hold back the water for a distance of nearly 40 miles, and form a lake with an area of 160 square miles and a capacity four and a half times as great as that of the Assuān reservoir on the Nile. From this a canal would be led to Bellary, tunnelling in its course through some rocky hills, and thence across the Hagari, through the watershed between this river and the Penner, and finally into the bed of the latter river. This canal and its distributaries would command portions of the Bellary, Kurnool, Anantapur, Cuddapah, and Nellore Districts of Madras. Detailed estimates for this great scheme, the cost of which is roughly estimated at 8 crores, are now under preparation.

The origin of the river is thus accounted for in local legend. A demon having seized the earth and carried it into the lower world, Vishnu became incarnate as a boar, and plunging into the ocean brought it up again. Resting after this exertion on the Varāha-parvat or 'boar mountain,' the perspiration trickling off his left tusk became the Tunga, and that from the right the Bhadra.

Hagari (or *Vedāvati*).—A river of Southern India, formed by two streams, the Veda and Avati, which rise in the Bābā Budan hills (Mysore), and after feeding the large Ayyankere and Madagkere tanks, thereby irrigating much land, unite to the east of Kadūr (13° 32′ N. and 76° 6′ E.). The united stream then runs north-east through Chitaldroog District, where it is dammed to form the great Māri Kanave reservoir, which is 34 square miles in extent, with 70 miles of distributary channels. East of Hiriyūr the river, which now takes the name of Hagari, turns north and passes into the Bellary District of Madras, the eastern portion of which it drains. It flows into the Tungabhadra by Hālekota after a course of 280 miles.

Penner (the *Uttara Pinākini* or Northern Pennār).—A river of Southern India which rises on Channarāyan-betta, to

the north-west of Nandidroog in the Kolār District of Mysore, and running north-west past Goribidnūr, enters the Anantapur District of Madras, at one point again crossing Mysore in a projecting part of the Pāvugada *tāluk* (Tumkūr District). Some distance north of Anantapur it turns to the east, and passing through Cuddapah and Nellore Districts, falls into the sea below Nellore. Its tributaries from Mysore are the Jayamangali, Chitrāvati, and Pāpaghni.

In Anantapur District the Penner runs for the most part in a wide and sandy bed. It comes down in sudden freshes (generally in October and November) for two or three days at a time, and then as quickly dries up again. In Cuddapah it is joined on its right bank by the Chitrāvati, and the two streams have forced a passage for themselves through the picturesque gorge of GANDIKOTA, about a mile long and 300 feet deep. Lower down the Pāpaghni flows into it, and thereafter, as it winds through the Eastern Ghāts, its course again becomes wild and beautiful.

The river enters Nellore District through a narrow gap in the Ghāts near Somasila, and thenceforward is for the first time rendered useful for irrigation. From Somasila to Sangam, a distance of 25 miles, it waters about 5,000 acres from inundation channels. At Sangam it is crossed by a dam, built in 1886, which is 4,072 feet long. On the left bank of the river this dam supplies the great Kanigiri reservoir, and thus irrigates 86,000 acres; and a channel is being constructed from it on the right bank, which will fill the Nellore reservoir and water 10,000 more. Lower down the river, at Nellore, a dam constructed in 1855 was repaired and brought into its present shape by Sir A. Cotton in 1858. The channels from it supply 64,000 acres of land on the right bank. Altogether the river irrigates 155,000 acres in this District, yielding a revenue of $3\frac{1}{4}$ lakhs, or about $5\frac{1}{3}$ per cent. upon the capital of 61 lakhs which has been invested. The great Tungabhadra project now in contemplation proposes to turn much of the surplus water of the Tungabhadra into the Penner, and this water would be utilized in Nellore District by constructing a high dam across the narrow gap at Somasila and forming a huge reservoir there. It is calculated that channels from this on both sides of the river would command 500,000 acres.

The Penner is crossed by the Madras Railway at Penneru in Anantapur District, and by the East Coast section of the same railway at Nellore, near its mouth.

Ponnaiyār (or Ponniār; the *Dakshina Pinākini* or Southern

Pennār).—A river of Southern India, which rises on Channarāyan-betta, north-east of Nandidroog in the Kolār District of Mysore, and runs through the east of Bangalore District, forming the large Jangamkote and Hoskote tanks. Leaving Mysore to the east of Sarjapur, it runs south-east through the Salem District of Madras (where it is crossed by the Madras Railway) and, some distance north of Dharmapuri, turns east to South Arcot District, and falls into the sea to the north of Cuddalore. Its length in Mysore is about 50 miles, where about 86 per cent. of its water is stored for agricultural purposes. It flows through the Madras Presidency for about 200 miles, and the area of its drainage basin is 6,200 square miles. The river is bridged near Cuddalore, and also at the point (near Panruti) where it is crossed by the South Indian Railway. Its only considerable tributary is the Pāmbār, which joins it on the left bank in Salem District. In South Arcot the Ponnaiyār runs in a wide sandy bed between low banks. At one time it seems to have flowed down the Malattār ('barren river'), which is now merely a small branch into which it occasionally spills at high floods; for ancient Tamil works speak of Tiruvennanallur, which is now on the southern bank of the Malattār, as lying on the southern edge of the Ponnaiyār. The river is very liable to sudden high freshes, and serious floods occurred in 1874, 1884, and 1898, those of 1884 being the worst. The Ponnaiyār and the neighbouring Gadilam river overflowed and joined, and for twenty-four hours their combined waters rushed through Cuddalore New Town to the sea. Thirteen arches of the bridge over the Ponnaiyār were swept away and much other damage was done.

The river is not at present utilized for irrigation on any considerable scale until near the end of its course. The dam near Tirukkoyilūr in South Arcot waters about 24,000 acres, from which the total revenue is Rs. 93,000. Of this, about Rs. 11,000 is due to the improvements made, representing an interest of over 4 per cent. on the capital outlay. The construction of a dam higher up the river, to supply a large area in two of the upland *tāluks* of the same District, has been suggested.

Like other large rivers, the Ponnaiyār is sacred. It is deemed especially so in the first five days of the Tamil month of Tai, when the Ganges is said to flow into it by underground ways. Festivals are then celebrated at many of the important villages along its banks.

Pālār (or *Kshīra-nadī*, the 'milk river').—A river of Southern

India, which has its reputed source on Nandidroog, in the Kolār District of Mysore. From near Kaivāra it turns south-east and leaves Mysore in the east of the Bowringpet *tāluk* (Kolār). Entering the North Arcot District of Madras, it bends to the north-east after descending the Ghāts, and flows into the Bay of Bengal near Sadras (Chingleput District). Its length in Mysore is about 47 miles, the entire drainage of the catchment basin, 1,036 square miles, being utilized for cultivation. Of the tanks on it, the largest are Betamangala and Rāmasāgara in the Bowringpet *tāluk*, the former being the source of water-supply for the Kolār Gold Fields. In Madras the length of the river is about 183 miles. There is some reason to believe that it once flowed to the sea from the valley through which now runs the Korttalaiyār, a stream which reaches the Bay of Bengal to the north of Madras city.

The chief tributaries of the Pālār are the Poini, which joins it on the left bank in North Arcot, and the Cheyyār, which meets it on the other bank in Chingleput District. On its banks are the towns of Vāniyambādi, Vellore, Arcot, and Chingleput. The first of these was greatly damaged by a sudden flood which swept down the river in 1903, causing the loss of hundreds of lives. Near Arcot the river is crossed by a dam built in 1857, and designed to give an improved supply to the old native channels which fed a large series of reservoirs in those parts. It was breached in 1874, but was subsequently restored, and is now 2,634 feet in length. The dam and the improved channels cost 21 lakhs and add to the supply of about 270 existing reservoirs, some of which are in Chingleput District; but they do not water any great extent of fresh land, and, if the receipts from the irrigation which existed before they were constructed be deducted, they are worked at a small loss. In Chingleput District about 50,000 acres are watered from the river, which feeds a series of tanks.

The Pālār is crossed by railway bridges at Mailpati (North Arcot District), and between Padalam and Kolatūr in Chingleput.

General course and sanctity.

Cauvery (*Kāveri*; the Χάβηρος of the Greek geographer Ptolemy).—A great river of Southern India, famous alike for its traditional sanctity, its picturesque scenery, and its utility for irrigation. Rising on the Brahmagiri, a hill in Coorg, high up amid the Western Ghāts (12° 25′ N. and 75° 34′ E.), it flows in a generally south-east direction across the plateau of Mysore, and finally pours itself into the Bay of Bengal in the Madras District of Tanjore. Total length, about 475 miles;

estimated area of drainage basin, 28,000 square miles. It is known to devout Hindus as *Dakshina Gangā*, or the 'Ganges of the South,' and the whole of its course is holy ground. According to the legend preserved in the Agneya and Skanda Purānas, there was once born upon earth a girl named Vishnumāya or Lopāmudra, the daughter of Brahmā; but her divine father permitted her to be regarded as the child of a mortal called Kavera-muni. In order to obtain beatitude for her adoptive father, she resolved to become a river whose water should purify from all sin. Hence it is that even the holy Gangā resorts underground, once in the year, to the source of the Cauvery, to purge herself from the pollution contracted from the crowd of sinners who have bathed in her waters. At Tala Kāveri, where the river rises, and at Bhāgamandala, where it receives its first tributary, stand ancient temples annually frequented by crowds of pilgrims in the month of Tulāmāsa (October–November).

Course in Coorg and Mysore.

The course of the Cauvery in Coorg is tortuous; its bed is rocky; its banks are high and covered with luxuriant vegetation. In the dry season it is fordable almost anywhere, but during the rains it swells into a torrent 20 or 30 feet deep. In this portion of its course it is joined by many tributaries—the Kakkabe, Kadanūr, Kumma-hole, Muttāra-mudi, Chikka-hole, and Suvarnāvati or Hāringi. Near the frontier, at the station of Fraserpet, it is spanned by a magnificent stone bridge, 516 feet in length. Soon after entering Mysore State, the Cauvery passes through a narrow gorge, with a fall of 60 to 80 feet in the rapids of Chunchan-Katte. After this it widens to an average breadth of from 300 to 400 yards till it receives the Kabbani, from which point it swells to a much broader stream. Its bed continues rocky, so as to forbid all navigation, but its banks are bordered with a rich belt of 'wet' cultivation. In its course through Mysore the river is interrupted by no less than twelve anicuts (dams) for the purpose of irrigation. Including irrigation from the tributaries, the total length of channels in the Cauvery system in Mysore was (in 1904–5) 968 miles, the area irrigated 112,000 acres, and the revenue obtained nearly 7 lakhs. The finest channel is 72 miles long, and two others each run to 41 miles. The construction of three of the principal dams is attributed to the Mysore king, Chikka Deva Rājā (1672–1704).

Islands and Falls of the Cauvery.

In Mysore the river forms the two islands of SERINGAPATAM and SIVASAMUDRAM, about 50 miles apart, which vie in sanctity with the island of Srīrangam lower down in Trichinopoly Dis-

trict. Both islands are approached from the north by interesting bridges of native construction, composed of hewn-stone pillars founded on the rocky bed of the stream, and connected by stone girders. The one at Seringapatam, about 1,400 feet long, named the Wellesley Bridge, after the Governor-General, was erected between 1802 and 1804 by the famous Diwān Pūrnaiya. That at Sivasamudram, 1,580 feet long, and called, after a Governor of Madras, the Lushington Bridge, was erected between 1830 and 1832 by a private individual, who also bridged the other arm in the same way, and was honoured with suitable rewards. The river is moreover bridged at Seringapatam for the Mysore State Railway, and at Yedatore. The first fresh in the river generally occurs about the middle of June. In August the flow of water begins to decrease, but the river is not generally fordable till the end of October.

Enclosing the island of Sivasamudram are the celebrated Falls of the Cauvery, unrivalled for romantic beauty. The river, here running north-east, branches into two channels, each of which makes a descent of 320 feet in a succession of rapids and broken cascades. The western fall is known as the Gagana Chukki ('sky spray'), and the eastern as the Bhar Chukki ('heavy spray'). The former, which is itself split by a small island, dashes with deafening roar over vast boulders of rock in a cloud of foam, the column of vapour rising from it being visible at times for miles. The eastern fall is quieter, and in the rainy season pours over the hill-side in an unbroken sheet a quarter of a mile broad. At other times the principal stream falls down a deep recess in the form of a horseshoe, and then rushes through a narrow channel, again falling about 30 feet into a large basin at the foot of the precipice. This waterfall is said to resemble the Horseshoe Fall of Niagara. The parted streams unite again on the north-east of the island and hurry on through wild and narrow gorges, one point being called the Mekedātu or 'goat's leap.'

The Cauvery has now been harnessed at Sivasamudram, the western fall being utilized for generating electricity to drive the machinery at the Kolār Gold Fields, 92 miles distant, and to supply electric lighting for the city and power for a mill at Bangalore, 59 miles away. The installation, delivering 4,000 h.p. at the mines, has been in successful operation since the middle of 1902, and was increased by 2,500 h.p. in 1905. It was the first of its kind in India, and at the time of its inception one of the longest lines of electric transmission in the world.

The principal towns on the river in Mysore are Yedatore, Seringapatam, and Talakād, the last named being an old capital, now almost buried under sand-dunes. Crocodiles are numerous; but they have seldom been known to attack fishermen, and the natives in general stand in no dread of them. Shoals of large fish, which are held sacred, are fed daily by the Brāhmans at Rāmnāthpur and Yedatore. The Mysore tributaries of the Cauvery are, on the north, the HEMĀVATI, Lokapāvani, Shimsha, and ARKĀVATI; on the south, the LAKSHMANTĪRTHA, KABBANI, and Suvarnāvati or HONNU-HOLE. Towns and tributaries in Mysore.

The Cauvery enters the Presidency of Madras at the Falls of Sivasamudram, and forms the boundary between the Districts of Coimbatore and Salem for a considerable distance, until it strikes into Trichinopoly. In this part of its course, near Alambādi in Coimbatore, there is a remarkable rock in the middle of the stream which throws up a column of perpetual spray, though the water round it is to all appearances quite unbroken. It is called the 'smoking rock,' and the natives declare that the spray is due to the river pouring into an enormous chasm in its bed. Close under the historic Rock of Trichinopoly the Cauvery breaks at the island of Srīrangam into two channels (crossed by masonry road bridges) which irrigate the delta of Tanjore, the garden of Southern India. The more northerly of these channels is called the COLEROON (Kollidam); that which continues the course of the river towards the east preserves the name of the Cauvery. On the seaward face of the delta are the open roadsteads of Tranquebar, Negapatam, and French Kārikāl. In Madras the chief tributaries of the Cauvery are the BHAVĀNI, Noyil, and Amarāvati. At Erode the river is crossed by the south-west line of the Madras Railway, by means of an iron girder-bridge, 1,536 feet long with 22 spans, on piers sunk into the solid rock. Course in Madras.

The only navigation which exists on the Cauvery is carried on in coracles of basket-work, but the Coleroon is navigable for a few miles above its mouth by vessels of 4 tons burden.

Although the water of the Cauvery is utilized to a considerable extent for agriculture in Mysore, and also in Coimbatore and Trichinopoly Districts, it is in its delta that its value for irrigation becomes most conspicuous. At Srīrangam, just above the point where it bifurcates to form the Coleroon, the flood discharge is estimated at 313,000 cubic feet per second. The problem of utilizing this storehouse of agricultural wealth was first grappled with about the eleventh century by one of the Irrigation.

Chola kings, who constructed a massive dam of unhewn stone, 1,080 feet long and from 40 to 60 feet broad, below the island of Srīrangam, to keep the Cauvery separate from the Coleroon and drive it towards Tanjore District. This is still in existence and is known as the 'Grand Anicut.' It has been improved by British engineers and a road bridge has been built upon it. Below it the kings of the same dynasty cut several of the chief canals of the delta, some of which still bear their names, and the Caùvery irrigation is thus less entirely due to the British Government than that in the GODĀVARI and KISTNA deltas. When the British first came into possession of Tanjore District, in 1801, it was found that the great volume of the water-supply was then passing down the Coleroon, which runs in a straighter course and at a lower level than the Cauvery, while the Cauvery proper was gradually silting up, and the irrigating channels that took off from it were becoming dry. The object of the engineering works that have been since constructed is to redress this unequal tendency, and to compel either channel to carry the maximum of water that can be put to good use. The first of these was the 'Upper Anicut' across the head of the Coleroon at the upper end of Srīrangam Island, constructed by Sir Arthur Cotton between 1836 and 1838. This is 2,250 feet long, broken by islands into three sections, and was designed to increase the supply in the Cauvery. It was followed in 1845 by a regulating dam, 1,950 feet long, across the Cauvery near the Grand Anicut, to prevent too much water flowing down this latter stream. Close to it a similar regulator was constructed in 1848 across the Vennār, one of the main branches of the Cauvery. From this point the Cauvery runs north-east and the Vennār south-east, both of them throwing off branch after branch, which in their turn split up into innumerable channels and form a vast network which irrigates the delta. At the off-take of all the more considerable of these, head-works have been constructed to control and regulate the flow. The Cauvery itself eventually enters the sea by an extremely insignificant channel. From the Lower Anicut across that stream the Coleroon irrigates land in South Arcot as well as in Tanjore. In the three Districts of Tanjore, Trichinopoly, and South Arcot the two rivers water 1,107,000 acres, yielding a revenue of 41 lakhs. The capital cost of the works of improvement and extension in the delta has been 28 lakhs, and the net revenue from them is $8\frac{1}{2}$ lakhs, representing a return of nearly 31 per cent. on the outlay.

Hemāvati (also called *Yenne-hole*).—A river of Mysore

and one of the chief tributaries of the CAUVERY. It rises on the Western Ghāts in the south-west of Kadūr District, and runs south-east through the Manjarābād *tāluk* to the Coorg frontier, where, joined by some streams from the west, it turns east. Receiving the Yagachi from the north, it then winds round Hole-Narsipur, and runs south to the Cauvery near Yedatore, after a course of over 160 miles. It has ten dams, from which about 145 miles of channels are drawn off, irrigating nearly 10,000 acres. The largest channels are the Srīrāmadevar north channel, 47 miles long, in Hassan District, and the Mandigere, 27 miles long, in Mysore District.

Arkāvati.—A tributary of the CAUVERY in Mysore, about 120 miles long, having its source on Nandidroog, and flowing through Bangalore District from north to south with a slight westerly direction. The Kumudvati from the west joins it south of Nelamangala, and the Vrishabhāvati from Bangalore on the east, north of Kānkānhalli. In its upper course are some large tanks, including Hesarghatta, the source of the water-supply of Bangalore city. From Sāvandurga southwards it runs mostly through a wild country, amid rocky hills and forest, and is therefore not much used for irrigation.

Lakshmantīrtha.—A tributary of the CAUVERY in Mysore. It rises in Brahmagiri, on the southern frontier of Coorg, and runs north-east through the Hunsūr *tāluk* of Mysore District into the Cauvery, beyond Sāgarkatte, at the common boundary of the Mysore and Yedatore *tāluks*, after a course of about 70 miles. It is a perennial stream, with seven dams in Mysore, from which are drawn channels 133 miles in length, irrigating nearly 8,000 acres.

Kabbani (also called *Kapini* or *Kapila*).—An important tributary of the CAUVERY. It rises on the Western Ghāts in North Wynaad, and enters Mysore at the south-west corner of Mysore District. Running north-east with a very winding course through the Heggadadevankote *tāluk* to near Belatūr, it there turns east, and receiving the Nugu and (at Nanjangūd) the Gundal, both from the south, flows into the Cauvery at Tirumakūdal Narsipur, the confluence being esteemed a spot of great sanctity. The Kabbani is a fine perennial river, 150 to 200 yards wide, and has a total course of about 150 miles, of which 120 are in Mysore. The Rāmpur channel, 32 miles long, drawn from it, irrigates nearly 1,400 acres.

Honnu-hole (or *Suvarnāvati*, both meaning 'golden stream').—A tributary of the CAUVERY, rising in the mountains of Coimbatore (Madras). It then flows through the

Chāmrājnagar *tāluk* and the Yelandūr *jāgir* of Mysore District (Mysore), and re-entering Coimbatore falls into the Cauvery opposite Talakād, after a course of about 50 miles. Its name is an index of the fertility it spreads on both banks. There are ten permanent dams on it, and additional temporary dams are constructed when the water is low. The channels fed by means of these are more than 50 miles in length, irrigating about 5,000 acres. The river also feeds a number of large tanks, such as the Rāmasamudra near Chāmrājnagar.

Ayyankere (or *Dodda-Madagkere*).—A beautiful lake, surrounded with high hills and studded with islands, situated to the east of the BĀBĀ BUDAN range in Mysore. It has been formed by embanking the perennial stream of the Gauri-halla, and its outflowing waters are called the Veda, which unites with the Avati to form the Vedāvati river (see HAGARI). The construction of this fine reservoir is attributed to Rukmāngada Rāya, an ancient king of Sakkarepatna. The embankment, of earth and stone, is about 1,700 feet long, and 300 feet high at the rear slope. The tank is very deep, and contains in many parts 35 feet of water. There is a tradition that the bank was once on the point of breaching, when the danger which threatened the town of Sakkarepatna from inundation was announced by the guardian goddess of the lake to Honbilla, the *nīrganti* or waterman. He obtained from her a promise that the catastrophe should be delayed until he returned with orders what to do from his master the king of Sakkarepatna, and hastening to the town delivered warning of the impending danger. The king sagely but inhumanly thought that, under the conditions of the promise, to prevent the return of the messenger would be to avert the catastrophe for ever. He accordingly had him killed on the spot, and the embankment has stood ever since. A shrine has been erected at Sakkarepatna to the memory of the unfortunate man thus sacrificed for its stability, at which worship is still performed. Considerable repairs were made to the embankment in the thirteenth century under the Hoysala kings.

Sūlekere.—The largest tank in Mysore next to the Māri Kanave reservoir (see HAGARI). It is in the middle of the Channagiri *tāluk* of Shimoga District, and is said to be 40 miles round. It receives the drainage of 457 square miles, and is formed by a dam in a narrow gorge on a stream called the Haridrā or Haridrāvati, which runs into the Tungabhadra at Harihar. The tank or *kere* is said to have been constructed in the eleventh or twelfth century by a *sūle* or dancing-girl,

whence its name. She was a king's daughter, and having formed a connexion with some divinity, built as an act of expiation the tank, which, however, submerged the city of her father, and she was cursed by him. The channels from the tank supply hundreds of acres planted with sugar-cane.

Gersoppa Falls.—The Gersoppa Falls are situated 14°14′ N. and 74° 49′ E., on the Bombay-Mysore frontier, about 18 miles east of Gersoppa, and 35 miles east of Honāvar (North Kānara District), from which they can best be visited. They are locally known as the Jog Falls, from the neighbouring village of Jog. The waterfall is on the Sharāvatī river, which, with a breadth above the falls of about 230 feet, hurls itself over a cliff 830 feet high, in four separate cascades, known as the Rājā (or Horseshoe) Fall, the Roarer, the Rocket, and La Dame Blanche. The best time to see the falls is early in December, when the river is low enough to make it possible to cross to the left or Mysore bank. Between June and November, when the river is flooded, the banks are shrouded in clouds of mist. From Gersoppa village the road climbs about 10 miles through noble stretches of forest to the crest of the Gersoppa or Malemani pass, and from the crest passes 8 miles farther to the falls. Close underwood hides all trace of the river, till, at the bungalow near the falls, the plateau commands a glorious view. The rock of the river-bed and the cliff over which the river falls are gneiss associated with hypogene schists. The Gersoppa Falls eclipse every other in India and have few rivals in the world for height, volume, and beauty combined. The varying effects of light and shade at different times of the day are among their greatest beauties. In the afternoon, as the sun sinks to the west, a lovely rainbow spans the waters; at night, the moon at times throws across the spray a belt of faintly-tinted light. On a dark night, rockets, blazing torches, or bundles of burning straw cast over the cliff light the raging waters with a fitful and weird glare. The best sight of the chasm is gained by lying down and peering over a pinnacle of rock, which stands out from the edge of the cliff. The finest general view of the falls is from the Mysore bank. From the right bank of the river a rough bamboo bridge crosses the Rājā channel to the rocks beyond. The path then keeps well above the edge of the cliff, among large rocks, over small channels, and across seven or eight of the broader streams by rude bamboo and palm-stem bridges. On the left or Mysore bank a well-kept path leads through shady woods to a point called Watkins's Platform, which

commands a view across the chasm to the deep cleft where the waters of the Rājā and the Roarer join and plunge into the pool below. Hence a further path through the woods leads down a series of steep steps to the open hill-side, which slopes to the bed of the river. The edge of the pool affords a fine general view of the falls, of the magnificent rugged chasm, and of the deep winding gorge through which, in the course of ages, the waters of the river have untiringly eaten their way.

Ashtagrām ('the eight townships').—The country on both banks of the Cauvery near Seringapatam, Mysore State, bestowed by the Hoysala king Vishnuvardhana, early in the twelfth century, on the Vaishnava reformer Rāmānuja, by whom he had been converted from the Jain faith. The reformer appointed Brāhmans to administer the tract, under the designation of Hebbārs and Prabhus, settling them in eight towns. The chiefs of Nāgamangala, probably descended from these, were put down at the end of the fifteenth century by the Vijayanagar king Narasinga, who took possession of Seringapatam. Under the Mysore kings the tract was formed into the Patna Ashtagrām and Maisūr Ashtagrām *tāluks*, the former to the north of the river and the latter to the south. In 1863 Mysore and Hassan Districts were constituted the Ashtagrām Division, which was abolished in 1880.

Bālāghāt ('above the Ghāts').—The name given by the Musalmāns of Bijāpur to a region conquered by them from Vijayanagar in the seventeenth century. It comprised the north-east part of Mysore and the Bellary, Anantapur, Kurnool, and Cuddapah Districts of Madras.

Banavāsi.—A 'twelve thousand' province[1], corresponding generally with the Shimoga District of Mysore, formed under the Chālukyas (sixth century) and subsequent rulers, with its capital at Balligāve (Belgāmi in the Shikārpur *tāluk*). Banavāsi, from which the province took its name, is an ancient city on the north-west border of Mysore State. It was the capital of the Kadambas from the second to the fifth century, and even later remained identified with them. It is mentioned by Ptolemy, and before that, in the third century B.C., was one of the places to which Asoka is said to have sent a Buddhist missionary.

The true Carnatic.

Carnatic (*Kannada*, *Karnāta*, *Karnātaka-desa*).—Properly,

[1] These numerical designations, almost invariably attached to the names of ancient divisions in Mysore, apparently refer to their revenue capacity or to the number of their *nāds*.

as the name implies, 'the Kanarese country.' The name has, however, been erroneously applied by modern European writers to the Tamil country of Madras, including the Telugu District of Nellore. The boundaries of the true Carnatic, or Karnātaka-desa, are given by Wilks as

'Commencing near the town of Bīdar, 18° 45′ N., about 60 miles north-west from Hyderābād (Deccan). Following the course of the Kanarese language to the south-east, it is found to be limited by a waving line which nearly touches Adoni, winds to the west of Gooty, skirts the town of Anantapur, and passing through Nandidroog, touches the range of the Eastern Ghāts; thence pursuing their southern course to the mountainous Pass of Gazzalhati, it continues to follow the abrupt turn caused by the great chasm of the western hills between the towns of Coimbatore, Pollāchi, and Pālghāt; and, sweeping to the north-west, skirts the edges of the precipitous Western Ghāts, nearly as far north as the sources of the Kistna; whence following first an eastern and afterwards a north-eastern course, it terminates in rather an acute angle near Bīdar, already described as its northern limit.'

This country has been ruled wholly or in part by many dynasties, of whom the Andhras or Sātavāhanas, the Kadambas, the Pallavas, the Gangas, the Chālukyas, the Rāshtrakūtas, the Cholas, the later Chālukyas, the Hoysalas, and the house of Vijayanagar are the most prominent. The Vijayanagar kings, who came into power about the year 1336, conquered the whole of the peninsula south of the Tungabhadra river. They were completely overthrown by the Muhammadans in 1565, and retired first to Penukonda, and then to Chandragiri, one branch of the family remaining at Anagundi opposite to their old capital. It was these conquests that probably led to the extension of the term 'Carnatic' to the southern plain country; and this latter region came to be called Karnāta Pāyanghāt, or 'lowlands,' to distinguish it from Karnāta Bālāghāt, or the 'hill country.' When the Muhammadan kings of the Deccan ousted the Vijayanagar dynasty, they divided the north of the Vijayanagar country between them into Carnatic Hyderābād (or Golconda) and Carnatic Bijāpur, each being further subdivided into Pāyanghāt and Bālāghāt. At this time, according to Wilks, the northern boundary of Karnāta (Carnatic) was the Tungabhadra.

The later or Madras Carnatic.

Speaking of this period and the modern misapplication of the name, Bishop Caldwell says (*Grammar of the Dravidian Languages*, pp. 34–5):—

'The term *Karnāta* or *Karnātaka* is said to have been a

generic term, including both the Telugu and Kanarese peoples and their languages, though it is admitted that it usually denoted the latter alone, and though it is to the latter that the abbreviated form Kannadam has been appropriated. Karnātaka (that which belongs to Karnāta) is regarded as a Sanskrit word by native Pandits; but I agree with Dr. Gundert in preferring to derive it from the Dravidian words *kar*, "black," *nādu* (the adjective form of which in Telugu is *nāti*), "country," that is, "the black country," a term very suitable to designate the "black cotton soil," as it is called, of the plateau of the Southern Deccan. The use of the term is of considerable antiquity, as we find it in the *Varāha-Mihira* at the beginning of the fifth[1] century A.D. Tārānātha also mentions Karnāta. The word Karnāta or Karnātaka, though at first a generic term, became in process of time the appellation of the Kanarese people and of their language alone, to the entire exclusion of the Telugu. Karnātaka has now got into the hands of foreigners, who have given it a new and entirely erroneous application. When the Muhammadans arrived in Southern India, they found that part of it with which they first became acquainted—the country above the Ghāts, including Mysore and part of Telingāna—called the Karnātaka country. In course of time, by a misapplication of terms, they applied the same name Karnātak, or Carnatic, to designate the country below the Ghāts, as well as that which was above. The English have carried the misapplication a step farther, and restricted the name to the country below the Ghāts, which never had any right to it whatever. Hence the Mysore country, which is probably the true Carnatic, is no longer called by that name; and what is now geographically termed "the Carnatic" is exclusively the country below the Ghāts on the Coromandel coast.'

The Bombay Carnatic.

It is this latter country which formed the dominions of the Nawābs of the Carnatic, who played such an important part in the struggle for supremacy between the English and the French in the eighteenth century, and which now forms the greater portion of the present Madras Presidency. This connotation still survives in the designation of Madras regiments as Carnatic infantry. Administratively, however, the term Carnatic (or Karnātak as it is there used) is now restricted to the Bombay portion of the original Karnāta, namely, the Districts of Belgaum, Dhārwār, and Bijāpur, and part of North Kanara, with the Native States of the Southern Marāthā Agency and Kolhāpur. *See* SOUTHERN MARĀTHĀ COUNTRY.

Extent.

Deccan (or *Dakhan*).—This name, a corruption of the Sanskrit *dakshina* = 'southern,' includes, in its widest sense, the whole of India south of the Narbadā river, or, which is nearly

[1] *Recte*, sixth.

the same thing, south of the Vindhya mountains. In its narrower sense it has much the same meaning as MAHĀRĀSHTRA, or the country where the Marāthī language is spoken, if the below-Ghāt tract be omitted. In this connotation its southern boundary lies along the course of the Kistna river. In a still narrower sense the Deccan is regarded as bounded on the north by the Sātmāla hills. Adopting the broadest meaning, the Deccan on its western side descends seaward by a succession of terraces from the WESTERN GHĀTS, which rise in parts to over 4,000 feet in height and terminate abruptly near Cape Comorin, the extreme southern point of the peninsula, at an elevation of 2,000 feet. From here, following the coast-line, the EASTERN GHĀTS commence in a series of detached groups, which, uniting in about latitude 11° 40′ N., run north-eastward along the Coromandel coast, with an average elevation of 1,500 feet, and join the Vindhyas, which cross the peninsula from west to east in nearly the same latitude (13° 20′ N.) as their western counterpart. The Vindhyan range thus joins the northern extremities of the two Ghāts and completes the peninsular triangle of the Deccan. The eastern side of the enclosed table-land being much lower than the western, all the principal rivers of the Deccan, the Godāvari, Kistna, and Cauvery, rising in the Western Ghats, flow eastward, and escape by openings in the Eastern Ghāts into the Bay of Bengal. Between the Ghāts and the sea on either side the land differs in being, on the east, composed in part of alluvial deposits brought down from the mountains, and sloping gently; while on the west the incline is abrupt, and the coast strip is broken by irregular spurs from the Ghāts, which at places descend into the sea in steep cliffs.

The Deccan table-land is one of the relics of the old Gondwāna continent which formerly connected India with Africa, and which broke up at about the time that the chalk was forming in Europe. It is one of the few solid blocks of ancient land which have not suffered any of the folding movements so marked in most lands, and which, so far as we know, have never been depressed below the ocean. Except near the present coasts at low levels, not a single marine fossil has been found in the whole Deccan. The 'basement complex' of the Deccan table-land includes the usual assemblage of gneisses and schists, among them the band of schists distinguished by the name of the Dhārwārs, containing the auriferous veins of Mysore which Geology[1].

[1] Contributed by Mr. T. H. Holland, Director, Geological Survey of India.

have, since they were opened up in 1881, yielded gold to the value of 19 millions sterling. Lying on the denuded surfaces of these ancient schists and gneisses are enormous thicknesses of unfossiliferous strata which, in default of evidence to the contrary, are regarded as pre-Cambrian in age. These occur as isolated patches in the Cuddapah and Kurnool Districts of Madras; in the Southern Marāthā country; in parts of the Godāvari valley; and in Gwalior, Bundelkhand, and the Vindhyan region of Central India. In small basins, generally preserved at lower levels, we find the coal-bearing deposits formed by the great rivers of the old Gondwāna continent in upper palaeozoic and mesozoic times, while for an area of some 200,000 square miles the older rocks are covered with great masses of basaltic lava, which spread over the country in Upper Cretaceous times and now form the highlands of the Deccan, remaining practically as horizontal as they must have been when they flowed as molten sheets over the country. Here and there, where the Deccan trap has been cut through by weather influences, we get glimpses of the old land-surface which was overwhelmed by lava-flows, while between the flows there were apparently interruptions sufficient to permit of the development of life in the lakes and rivers, of which the records are preserved in the so-called inter-trappean beds of fresh-water limestone, shales, and sandstones. The scenery of the Deccan trap highlands is the result of the subaerial erosion of the horizontal sheets of lava; the first plateaux of the hill-tops, and the horizontal terraces, which are traceable for miles along the scarps, are features eminently characteristic of the weathering of basaltic lava-flows. The long grass, the general absence of large trees, and the occurrence of almost purely deciduous forms, combine with the outlines of the hills to distinguish the trap areas from all others in the Deccan.

Two peculiar features of the Deccan are worth special mention: one is the occurrence, over most of the trap area, of the peculiar black, argillaceous, and calcareous soil known as *regar*, and, from its suitability for cotton-growing, as 'cotton soil'; the other is the peculiar decomposition product known as laterite, which is essentially a dirty mixture of aluminic and ferric hydrates, formed by a special form of rock alteration confined to moist tropical climates, and often resembling the material known as bauxite which is worked as a source of aluminium.

History. Little is known in detail of the history of the Deccan before the close of the thirteenth century. Hindu legends tell of its

invasion by Rāma, and the main authentic points known are the coming of the first Aryans (*c.* seventh century B.C.), the advance of the Mauryas (250 B.C.), and the Scythic invasion of A.D. 100. Archaeological remains and inscriptions bear witness to a series of dynasties, of which the Cholas, the Andhras or Sātavāhanas, the Chālukyas, the Rāshtrakūtas, and the Yādavas of Deogiri are the best known. (*See* BOMBAY PRESIDENCY—History.) The country was known to the author of the Periplus in the third century A.D. as *Dachina Bades* (Dakshināpata), and to the Chinese pilgrim Fa Hian in the fifth century as Ta Thsin. Continuous history commences with the Muhammadan invasion of 1294–1300, when Alā-ud-dīn, the Khiljī emperor of Delhi, overran Mahārāshtra, Telingāna, and Karnāta. In 1338 the reduction of the Deccan was completed by Muhammad bin Tughlak; but a few years later a general revolt resulted in the establishment of the Muhammadan Bahmani dynasty, and the retrogression of Delhi supremacy beyond the Narbadā. The Bahmani dynasty advanced its eastern frontier at the expense of the Hindu kingdom of Telingāna to Golconda in 1373, to Warangal in 1421, and to the Bay of Bengal in 1472. A few years later (1482) it began to disintegrate, and was broken up into the five rival Muhammadan kingdoms of BIJĀPUR, AHMADNAGAR, GOLCONDA, BĪDAR, and BERĀR. These were counterbalanced in the south, as the Bahmani empire had been, by the great Hindu kingdom of VIJAYANAGAR, which was however destroyed in 1565, at the battle of Tālikotā, by a coalition of the Muhammadan powers. Of these, Bīdar and Berār became extinct before 1630; the other three kingdoms were restored to the Delhi empire by the victories of Akbar, Shāh Jahān, and Aurangzeb. The Deccan was thus for a second time brought under the Delhi rule, but not for long. The Marāthās in 1706 obtained the right of levying tribute over Southern India, and their leading chiefs, who had practically superseded the dynasty of Sivajī, were the Peshwās of Poona. A great Delhi viceroy (the Nizām-ul-mulk), rallying all the Muhammadans of the South round him, established the Nizāmat of HYDERĀBĀD. The remainder of the imperial possessions in the Deccan was divided among minor princes, who generally acknowledged the supremacy of the Peshwā or the Nizām, according as they were north or south of the Tungabhadra. MYSORE, alternately tributary to both, became eventually the prize of Haidar Alī, while in the extreme south the Travancore State enjoyed, by its isolated position, uninterrupted

independence. Such was the position of affairs early in the eighteenth century. Meanwhile Portugal, Holland, France, and England had effected settlements on the coast; but the two former on so small a scale that they took no important part in the wars of succession between the native princes which occupied the middle of the century. The French and English, however, espoused opposite sides, and their struggles eventually resulted in establishing the supremacy of the latter (1761), which became definitely affirmed, under Lords Wellesley and Hastings, by the establishment of British influence at Hyderābād, the overthrow of Tipū Sultān, and the Marāthā Wars which followed, and the annexation of the Peshwā's dominions in 1818. The dominions of the other important Marāthā chief of the Deccan, the Bhonsla Rājā of Nāgpur, lapsed to the British on the extinction of the dynasty in 1854. The Deccan is to-day included in the Presidency of Madras, part of Bombay and the Central Provinces, together with Hyderābād, Mysore, and other Native States.

Gangavādi.—The territory of the Ganga kings in Mysore, who ruled from the second to the eleventh century. It was a 'ninety-six thousand' province[1], the boundaries of which are given as—north, Marandale (not identified); east, Tondanād (the Madras country east from Mysore); west, the ocean in the direction of Chera (Cochin and Travancore); south, Kongu (Salem and Coimbatore). The inhabitants of Gangavādi are represented by the existing Gangadikāras, a contraction of Gangavādikāras.

Nāgarakhanda.—An ancient province corresponding generally with the Shikārpur *tāluk* of Shimoga District in Mysore. It was a 'seventy' province[1], and its capital was at Bandanikke, or Bandalikke, also called Bāndhavapura, now deserted and in ruins. According to an old inscription, Nāgarakhanda was at one time ruled by 'the wise Chandra Gupta.'

Nolambavādi (or *Nonambāvadi*).—The territory of the Nonamba or Nolamba kings, a 'thirty-two thousand' province[1], corresponding generally with the Chitaldroog District of Mysore. The Nonambas or Nolambas were a branch of the Pallavas, the early rulers of the Telugu country and other parts of Madras, and their name appears from the ninth century. The existing Nonabas in Mysore represent the former inhabitants of Nonambavādi.

[1] These numerical designations, almost invariably attached to the names of ancient divisions in Mysore, apparently refer to their revenue capacity or to the number of their *nāds*.

Pāyanghāt ('below the Ghāts').—The name given by the Musalmāns of Bijāpur to the low country in the east of the present Mysore State, conquered by them from Vijayanagar in the seventeenth century.

Punnāta.—An ancient kingdom in the south-west of Mysore State, with its capital at Kitthipura, now Kittūr, on the Kabbani. It was a 'six thousand' province, and was absorbed into the Ganga kingdom in the fifth century. In the fourth century B.C., Bhadrabāhu, the Jain leader, who is said to have been accompanied to the south by Chandra Gupta, and who died at Sravana Belgola, directed the migration he had conducted from the north to proceed to Punnāta, when he found that his own end was approaching. It is mentioned as *Pounnata* by Ptolemy, who adds regarding it 'where is beryl.'

MYSORE BY DISTRICTS

Area and boundaries.

Bangalore District.—A District in the south-east of Mysore State, lying between 12° 15′ and 13° 30′ N. and 77° 4′ and 77° 59′ E., with an area of 3,092 square miles. It is bounded north and east by Kolār and the Salem District of Madras; west by Tumkūr and Mysore Districts; south by the Coimbatore District of Madras.

Physical aspects.

The main portion of the District consists of the valley of the Arkāvati, with the Cauvery flowing at the southern base. The east includes the upper basin of the Ponnaiyār, the south-west a part of the basin of the Shimsha. The central, southern, and eastern parts are mostly open and undulating. Westward the country is broken and rugged, with a succession of hills, the eastern watershed of the Cauvery rising in places to lofty mountain peaks, such as Sivaganga (4,559 feet) and Sāvandurga (4,024 feet). The low-lying lands contain series of tanks; the uplands are often bare or covered with scrub jungle. The hills in the south, as well as Sāvandurga, are surrounded with forest.

Geology.

The prevailing rock is gneiss, disrupted by trap seams, dikes, and large outcrops, and also by porphyritic and fine-grained granite rocks, rock crystal, amethystic smoky and milky quartz. Adularia, pink felspar, chert, corundum, chalcedony, mica, and hornblende are found. Haematitic iron ore is abundant. Nodular limestone is found in the valleys, and near Kānkānhalli is a formation of indusial lime. Kaolinitic clays occur, and laterite is found as a flat capping, resting on the denuded surface of gneiss.

Botany.

The hilly parts to the west contain many plants of the Malnād, but of smaller size, such as *Sterculia*, *Erythrina*, &c. But the greater part of the vegetation of the District is made up of plants such as *Alangium Lamarckii*, *Heptapleurum venulosum*, *Cassias*, *Bassias*, *Acacias*, *Ficus*, *Bauhinias*, *Mangifera*, *Pongamia*, &c. *Casuarina equisetifolia* is a common exotic, and *Lantana Camara* is spreading in rank growth.

Climate.

The climate of Bangalore city is noted for its salubrity, and the tracts north and east are healthy; but the *tāluks* traversed by the western range of hills are subject to malarious fever. The annual rainfall at Bangalore averages 35 inches. The southern *tāluks* get more, and Nelamangala less. The wettest

months are generally September and October. The average mean temperature and diurnal range at Bangalore are: in January, 69° and 23°; in May, 80° and 22°; in July, 74° and 16°; in November, 71° and 17°.

Till 1004 the District was a part of the Ganga kingdom of Gangavādi. In the seventh century Mankunda (in the Channapatna *tāluk*) was the royal residence, and in the eighth century Mānyapura (Manne, in the Nelamangala *tāluk*). Traces also exist of the Pallavas in the east, and of the Rāshtrakūtas in the north. The Cholas next held the District till 1116, giving it the name Vikramachola-mandala. The Hoysalas followed till 1336, when the Vijayanagar kingdom was established. Early in the next century certain Morasu Wokkaligas from the east formed States tributary to Vijayanagar, those in this District being YELAHANKA, DEVANHALLI, and DOD-BALLĀPUR. HOSKOTE belonged to a chief in Kolār District. Kempe Gauda, a Yelahanka chief, founded Bangalore in 1537, and his son acquired MĀGADI and SĀVANDURGA. Meanwhile, under the name of the Sivasamudram[1] country, much of the District seems to have been subject to the chief of Ummattūr (Mysore District), till he was put down by the Vijayanagar king in 1510. After the fall of Vijayanagar in 1565, Jagadeva Rāya, the chief of Bāramahāl (Salem District), repelled the Musalmān attack on Penukonda in 1577, and was rewarded with territory in Mysore, his capital being fixed at Channapatna. In 1644 the District came under the rule of Bijāpur, and was given, with other neighbouring tracts, as a *jāgīr* to Shāhji, father of the Marāthā leader Sivajī. In 1687 the Mughals overran the country to the north, and formed the province of SĪRA (Tumkūr District). At this time Bangalore was sold to the Mysore Rājās, who by the end of the seventeenth century had gained possession of the whole District, except Hoskote and Dod-Ballāpur, which were acquired soon after. History.

Kistvaens have been explored near Jāla and Sāvandurga and found to contain the usual articles of pottery. A find of Roman coins at Yesvantpur in 1891 yielded silver *denarii* of the early emperors Augustus to Claudius. In the Museum is an inscribed stone of the end of the ninth century, brought from Begūr, elaborately sculptured with a battle scene. In the Bangalore fort are the remains of Tipū Sultān's palace. The inscriptions of the District have been translated and published. Archaeology.

[1] The name is that of the island at the Falls of the Cauvery, where the chief had his fortress and the temple of his family god.

The people.

The population was 842,233 in 1871, 679,664 in 1881, 802,994 in 1891, and 879,263 in 1901. The decrease in 1881 was due to the famine of 1876–8. By religion, in 1901 there were 767,413 Hindus, 73,944 Musalmāns, 25,705 Christians, 11,269 Animists, 837 Jains, and 95 'others.' The density was 284 persons per square mile, that for the whole State being 185. BANGALORE CITY (population, 159,046), the District head-quarters, is the only place with more than 20,000 inhabitants.

The following are the principal statistics of population in 1901:—

Tāluk.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Bangalore . .	347	4	367	264,049	763	− 2·1	37,044
Nelamangala .	272	2	337	71,952	264	+ 14·0	3,544
Māgadi . .	359	1	334	76,986	215	+ 19·7	3,205
Dod-Ballāpur .	341	1	342	74,609	219	+ 13·7	3,478
Devanhalli . .	235	2	284	60,537	257	+ 12·9	2,792
Hoskote . .	272	2	365	72,855	26[illegible]	+ 20·1	3,064
Anekal . .	190	3	202	60,071	316	+ 9·5	2,484
Kānkānhalli .	623	1	252	83,577	134	+ 16·3	2,902
Channapatna .	453	2	267	114,627	253	+ 15·4	4,891
District total	3,092	18	2,750	879,263	284	+ 9·4	63,4[illegible]4

Castes and occupations.

The numerically strongest castes are Wokkaligas or cultivators, 244,000; next, the outcaste Holeyas and Mādigas, 95,000 and 51,000; then Kurubas or shepherds, 39,000; Tigalas or market gardeners, 32,000; Woddas or stonemasons, and Neygi or weavers, 24,000 each. Of Lingāyats there are 39,000 and of Brāhmans 30,000. Among Musalmāns there are 36,000 Shaikhs, 12,300 Saiyids, and 12,000 Pathāns. The nomad tribes are represented by 5,300 Koracha or Korama, and 3,800 Lambānis. As regards occupations, 54 per cent. of the population are engaged in pasture and agriculture, 15 per cent. in the preparation and supply of material substances, 7 per cent. in unskilled labour not agricultural, and 6 per cent. in the State service.

Christian missions.

Bangalore District contains more than half of the 50,000 Christians in the State of Mysore, and nearly one-third of the total are in the Civil and Military Station of Bangalore. Of native Christians the great majority are Roman Catholics. A chapel is said to have been built by a Dominican friar at Anel. ! so far back as 1400. Bangalore and Devanhalli were

occupied by Jesuit priests in 1702, and Kānkānhalli in 1704. The Bishop resides at Bangalore, where the Roman Catholics have important educational and medical institutions, while they have formed two agricultural settlements in the District for famine orphans. The Anglican and Scottish churches are mainly for the European garrison of Bangalore, but the chaplains also visit Whitefield and Chik-Bānāvar. For natives, the Church of England S.P.G. Mission has a church, and the Zanāna Mission has a *gosha* hospital for females and schools. The latter has also established a *gosha* hospital at Channapatna. The London and Wesleyan Missions began work among the natives, in Bangalore, in 1820 and 1822 respectively. The sphere of the former is to the east and north of the District, and that of the latter to the west and south. They have places of worship and large schools in Bangalore. The Wesleyan Mission press was for many years of great importance, but has now been removed to Mysore. The American Methodist Episcopal Mission was established in Bangalore in 1880, in the parts mostly occupied by Eurasians. There are also small communities of Baptists and Lutherans, both in Bangalore.

General agricultural conditions.

The prevailing soil is a fertile red loam, found in every shade from light to dark red and deep chocolate. It overlies the metamorphic granite, and varies from a few inches to several feet in depth. The darker rich red and chocolate soils are supposed to be mould weathered from the trap rocks. The decomposition of the normal gneissose rock gives the grey, sandy, and sterile soils, and the kaolinitic clays. There are a few isolated tracts of black soil, but not sufficient for the special cultivation usual in such ground.

Chief agricultural statistics and principal crops.

The following are the statistics of cultivation in 1903-4:—

Tāluk.	Area in square miles, shown in the revenue accounts.				
	Total.	Cultivated.	Irrigated.	Forests.	Cultivable waste.
Bangalore	255	130	22	6	22
Nelamangala	232	125	11	6	15
Māgadi	301	123	11	17	16
Dod-Ballāpur	290	110	11	20	41
Devanhalli	179	67	15	2	16
Hoskote	210	75	19	6	12
Anekal	161	78	13	8	6
Kānkānhalli	591	141	2	197	7
Channapatna	408	153	16	106	5
Total	2,627	1,002	120	368	140

Rāgi is the principal crop. In 1903-4 *rāgi* occupied 601 square miles, rice 98, gram 91, other food-grains 107, oilseeds 36, orchards and garden produce 16, fodder crops 11. Coffee has been successfully grown in the plains, with irrigation, but the fall in prices has stopped its cultivation. Numerous private plantations have been formed of grafted mango-trees, and of casuarina for fuel.

Agricultural loans. From 1891 to 1904, 1·37 lakhs was advanced for irrigation wells. Loans for land improvement during the eight years ending 1904 amounted to Rs. 55,000.

Irrigation. There are no irrigation canals, but 109 square miles are supplied from tanks and wells, and 11 from other sources. The number of tanks is 1,969, of which 402 are classed as 'major.'

Forests. The area of State forests in 1904 was 322 square miles, of 'reserved' lands 74, and of plantations 19. Teak grows, but not at its best. Casuarinas supply scaffolding poles and fuel. Sandal-wood and bamboos are important products. The forest receipts in 1903-4 were Rs. 77,000.

Mines and quarries. There are no mines. Gneissose stone is everywhere quarried for building purposes, and broken up for road metal. Limestone is found, as well as pottery clay.

Arts and manufactures. Bangalore city contains woollen, cotton, and silk-mills, tile and brick works, oil-mills, coffee-curing works, an iron foundry, and brass and copper works, under European management; breweries, partly under European and partly under native management; and tanneries, under Muhammadans. The number of private looms or small works in the District is: for silk, 370; cotton, 4,647; wool, 681; other fibres, 25; wood, 92; iron, 209; brass and copper, 28; building materials, 94; oil-mills, 481; jaggery and sugar, 597.

Commerce and trade. The chief articles of commerce are grain, cloth, silk, and oilseeds. Cotton cloth and coarse woollen blankets are woven in all parts. Tape for bedsteads and cotton carpets are made at Sarjāpur. Good drugget carpets are produced in Bangalore, but the demand for them is not so great as in former days. Silks of stout texture and costly patterns are also woven in Bangalore. The production of raw silk is a reviving industry; and inspectors of sericulture, trained in Japanese methods at Mr. Tata's silk farm in Bangalore, have been appointed for its improvement. Steel wire of a superior quality, for strings of musical instruments, is made at Channapatna, where also lacquered ware and toys are manufactured. Iron and steel are produced to some extent in Māgadi. Oil-pressing from

castor, ground-nuts, and gingelly seed is general. Bangalore city is a centre for numerous industries ministering to the wants of Europeans. In addition to the city, the chief marts of trade in the District are Channapatna, Dod-Ballāpur, Sarjāpur, Vadigenhalli, Tyāmagondal, and Hindigināl.

The railway system radiates from Bangalore city, and the total length of railways in the District is 130 miles. The Bangalore branch of the Madras Railway, broad gauge, runs east to Jalārpet. The remaining lines, metre gauge, are the Mysore State Railway, south-west to Mysore and Nanjangūd, and the Southern Mahratta Railway, north to Guntakal and north-west to Poona. A light railway, 2 feet gauge, is projected to run north to Chik-Ballāpur. Provincial roads, leading to Madras, Salem, Hindupur, Bellary, Mangalore, and Cannanore, have a total length of 230 miles. The total length of District roads is 448 miles. All main roads are metalled. Means of communication.

Since the great famine which ended in 1878, scarcity owing to failure of the rainfall has been felt in parts of the District in 1884–5, in 1891–2, and in 1896–7; but remedial measures were adopted, principally in providing facilities for grazing in 'reserved' lands, and distress was not serious. Famine.

The District is divided into nine *tāluks*: Anekal, Bangalore, Channapatna, Devanhalli, Dod-Ballāpur, Hoskote, Kānkānhalli, Māgadi, and Nelamangala. The District is under a Deputy-Commissioner; and since 1903 the *tāluks* have been formed into three groups under Assistant Commissioners. The groups are: Dod-Ballāpur, Devanhalli, and Nelamangala, with head-quarters at Nelamangala; Bangalore, Hoskote, and Anekal, with head-quarters at Bangalore; Kānkānhalli, Channapatna, and Māgadi, with head-quarters at Closepet. Divisions.

Besides the Chief Court, whose jurisdiction extends over the whole State, there are the District court and the Subordinate Judge's court, both with jurisdiction over Bangalore, Kolār, and Tumkūr Districts, and three Munsifs' courts. All are in Bangalore, except one Munsif's court at Dod-Ballāpur. Serious crime is not common. Judicial.

The land revenue and total revenue are shown below, in thousands of rupees:— Land revenue.

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	8,60	10,62	12,17	12,29
Total revenue . .	16,74	22,71	23,17	24,77

The revenue survey and settlement were carried out in

Bangalore and the west between 1872 and 1879, in the north and east between 1881 and 1886, and in the south between 1891 and 1896. The incidence of land revenue per acre of cultivated area in 1903-4 was Rs. 1-10-3. The average assessment per acre on 'dry' land is Rs. 1-1-8 (maximum scale Rs. 2-12-0, minimum scale R. 0-1-0); on 'wet' land, Rs. 4-12-10 (maximum scale Rs. 10-0-0, minimum scale R. 0-7-0); and on garden land, Rs. 4-15-8 (maximum scale Rs. 20, minimum scale Rs. 2).

Local boards.

Excluding the Civil and Military Station of Bangalore, which is under British administration, there were 13 municipal boards in 1904, and 4 Unions. The municipalities are Bangalore city, Hoskote, Dod-Ballāpur, Nelamangala, Tyāmagondal, Kānkānhalli, Māgadi, Closepet, Channapatna, Anekal, Sarjāpur, Devanhalli, and Vadigenhalli. The Unions are Yelahanka, Kengeri, Sūlibele, and Dommasandra. Apart from Bangalore city, the total municipal income in 1903-4 was Rs. 37,000, and the expenditure 39,000; those of the Unions were Rs. 3,900 and Rs. 7,400. The District and *tāluk* boards in that year had an income of Rs. 73,000 and an expenditure of Rs. 70,000, the cost of public works being Rs. 61,000.

Police and jails.

The police force in 1903-4 consisted of 3 superior officers, 132 subordinate officers, and 826 constables, of whom 38 officers and 289 constables form the city police. The Bangalore Central jail has accommodation for 892 prisoners. The daily average in 1904 was 684. There are also nine lock-ups, with a daily average of seven prisoners.

Education.

The percentage of literate persons (excluding the Civil and Military Station of Bangalore) in 1901 was 20·5 in the city and 4·3 in the District (10·4 males and 0·9 females). The number of schools increased from 520 with 19,811 pupils in 1890-1 to 563 with 19,819 pupils in 1900-1. In 1903-4 there were 588 schools (409 public and 179 private) with 20,186 pupils, of whom 3,977 were girls. The Civil and Military Station of Bangalore contained in 1903-4, in addition, 117 schools (62 public and 55 private), with 6,931 pupils (4,234 male, 2,697 female), besides schools under the military authorities. The colleges are the Central, of the first grade, and St. Joseph's, of the second grade, with college classes for girls at the Sacred Heart. Of special schools, there are two industrial, one commercial, and one training school.

Medical.

Besides the large hospitals in Bangalore, there were sixteen dispensaries in the District in 1904, at which 226,000 patients wer- treated, of whom 4,520 were in-patients, the beds available

being 123 for men and 83 for women. The total expenditure was 1·57 lakhs.

The number of persons vaccinated in 1904 was 8,797, or only 10 per 1,000 of the population. Vaccination.

Bangalore Tāluk.—Central *tāluk* of Bangalore District, Mysore, lying between 12° 48′ and 13° 10′ N. and 77° 25′ and 77° 47′ E., with an area of 347 square miles. The population fell to 264,049 in 1901 from 269,683 in 1891, the decrease being chiefly due to plague. The *tāluk* contains one city, BANGALORE (population, 159,046), the head-quarters; two towns, YELAHANKA (2,437) and Kengeri (1,608); and 367 villages. Excluding the Civil and Military Station, the land revenue demand in 1903–4 was Rs. 1,65,000. The greater part of the *tāluk* drains to the east into the Ponnaiyār through two streams which form continuous chains of tanks. In the west a stream rising at the Bull temple, south of Bangalore, flows into the Arkāvati. The south-west is rocky and hilly; the remainder is an open, well-cultivated country, undulating much towards the north-west.

Nelamangala.—Northern *tāluk* of Bangalore District, Mysore, lying between 12° 58′ and 13° 20′ N. and 77° 11′ and 77° 32′ E., with an area of 272 square miles. The population in 1901 was 71,952, compared with 63,119 in 1891. The *tāluk* contains two towns, Tyāmagondal (population, 4,099) and Nelamangala (4,025), the head-quarters; and 337 villages. The land revenue demand in 1903–4 was Rs. 1,37,000. The Arkāvati runs through the east, and the west has a chain of hills, of which Sivaganga (4,559 feet) is the highest point. The west is broken and jungly, while the other parts are open, and contain some large valleys with fine tanks. The soil is chiefly a red mould, shallow, and gravelly. Iron ore is found in some parts.

Māgadi.—Western *tāluk* of Bangalore District, Mysore, lying between 12° 50′ and 13° 12′ N. and 77° 4′ and 77° 27′ E., with an area of 359 square miles. The population rose to 76,986 in 1901 from 64,334 in 1891. The *taluk* contains one town, Māgadi (population, 3,608), the head-quarters, and 334 villages. The land revenue demand in 1903–4 was Rs. 1,35,000. This is a hilly and jungly *tāluk*, with the Arkāvati running through the south-east in a deep bed. Sāvandurga (4,024 feet) is the loftiest mountain, surrounded by deep defiles and a State forest. In the north-west a chain of tanks is formed by a stream running to the Shimsha. The soil is generally poor, a shallow red mould mixed with stones. Some tobacco is grown.

Dod-Ballāpur Tāluk.—North-western *tāluk* of Bangalore District, Mysore, lying between 13° 7′ and 13° 30′ N. and 77° 19′ and 77° 40′ E., with an area of 341 square miles. The population rose to 74,609 in 1901 from 65,613 in 1891. The *tāluk* contains one town, DOD-BALLĀPUR (population, 7,094), the head-quarters, and 342 villages. The land revenue demand in 1903–4 was Rs. 1,56,000. On the north is a hilly range, covered with jungle, with a pass down to Goribidnūr. The whole *tāluk* is drained by the Arkāvati, which supplies some large tanks. The west and parts of the south are jungly, with good pasturage, but the country is generally open and the soil good. Some tobacco and potatoes are grown.

Devanhalli Tāluk.—Northern *tāluk* of Bangalore District, Mysore, lying between 13° 5′ and 13° 22′ N. and 77° 32′ and 77° 50′ E., with an area of 235 square miles. The population rose to 60,537 in 1901 from 53,582 in 1891. The *tāluk* contains two towns, DEVANHALLI (population, 6,649), the head-quarters, and VADIGENHALLI (4,008); and 284 villages. The land revenue demand in 1903–4 was Rs. 1,21,000. There are a few small hills and rocks to the north and west, but the country is chiefly open, fertile, and well supplied with good water. The upper course of the Ponnaiyār lies on the eastern boundary. In the north are many *talpargis* or surface springs. Until prohibited, poppy was cultivated for opium. Potatoes grow well.

Hoskote.—Eastern *tāluk* of Bangalore District, Mysore, lying between 12° 51′ and 13° 15′ N. and 77° 38′ and 77° 59′ E., with an area of 272 square miles. The population rose to 73,855 in 1901 from 60,667 in 1891. The *tāluk* contains two towns, Hoskote (population, 3,184) and Sūlibele (2,186), and 365 villages. The land revenue demand in 1903–4 was Rs. 1,55,000. The Ponnaiyār is the western boundary towards the north, and, forming the large Hoskote tank, runs through the south of the *tāluk*. Except for a few low hills in the north, the country is open. Along the river and east from Nandagudi the best cultivation is found. Some potatoes are grown, and poppy used to be grown formerly. Hay is made near Hoskote for the Bangalore market. Hoskote town, the head-quarters, is situated in 13° 4′ N. and 77° 48′ E., on the Ponnaiyār, 6 miles from Whitefield railway station. Hosa-kote, the 'new fort,' so called to distinguish it from KOLĀR, was built about 1595 by the Sugatūr chief, who also made the large tank, 10 miles in circumference when full.

Anekal Tāluk.—South-eastern *tāluk* of Bangalore District, Mysore, lying between 12° 40′ and 12° 55′ N. and 77° 32′ and 77° 49′ E., with an area of 190 square miles. The population in 1901 was 60,071, compared with 54,834 in 1891. The *tāluk* contains 3 towns and 202 villages. The former are ANEKAL (population, 5,174), the head-quarters, SARJĀPUR (3,056), and Dommasandra (1,861). The land revenue demand in 1903–4 was Rs. 1,26,000. The *tāluk* consists of two valleys draining east into the Ponnaiyār. The west side is hilly and jungly, and drains to the Arkāvati.

Kānkānhalli Tāluk.—Southern *tāluk* of Bangalore District, Mysore, lying between 12° 15′ and 12° 49′ N. and 77° 14′ and 77° 38′ E., with an area of 623 square miles. The population rose to 83,577 in 1901 from 71,868 in 1891. The *tāluk* contains one town, KĀNKĀNHALLI (population, 5,588), the head-quarters, and 252 villages. The land revenue demand in 1903–4 was Rs. 1,02,000. The Arkāvati enters the *tāluk* on the north-west, and flows into the Cauvery, which forms the southern boundary. The south is occupied by high hills and forests, with extensive grazing-grounds. *Rāgi*, *avare*, and castor-oil are the chief crops of the open parts. Tamarinds, coco-nuts, and mulberry are grown along the streams. The soils are generally shallow and rocky.

Channapatna Tāluk.—South-western *tāluk* of Bangalore District, Mysore, containing the sub-*tāluk* of Closepet, and lying between 12° 28′ and 12° 54′ N. and 77° 5′ and 77° 29′ E., with an area of 453 square miles. The population in 1901 was 114,627, compared with 99,294 in 1891. The *tāluk* contains two towns, CHANNAPATNA (population, 10,425), the head-quarters, and CLOSEPET (6,099); and 267 villages. The land revenue demand in 1903–4 was Rs. 1,43,000. The north and north-west are crossed by ranges of hills, and contain much waste land, often covered with scrub jungle. The south and south-west are open, with populous villages and large tanks. The Arkāvati in the east, and the Kanva in the west, both run from north to south. The former is fringed with mulberry gardens, watered by lifts from the stream; and the lower course of the latter runs through coco-nut gardens, the soil being favourable and water near the surface.

Anekal Town.—Head-quarters of the *tāluk* of the same name in Bangalore District, Mysore, situated in 12° 43′ N. and 77° 42′ E., 22 miles south-east of Bangalore city. Population (1901), 5,174. The name[1] means 'elephant stone,'

[1] The name may be a corruption of *ane kal*, 'dam stone' (see MYSORE, p. 49).

or 'hailstone,' but no legend explains it. The present fort and tank were made early in the seventeenth century by a chief of the Sugatūr family ousted from Hoskote by the Bijāpur army. A century later Anekal was made tributary to Mysore, and in 1760 annexed to it by Haidar. The Dominicans are said to have built a chapel here in 1400. It is now an out-station of the London Mission. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 3,000. In 1903-4 the income and expenditure were Rs. 3,100 and Rs. 4,600.

Avati.—Village in the north of the Devanhalli *tāluk* of Bangalore District, Mysore, situated in 13° 18′ N. and 77° 43′ E. Population (1901), 1,226. The name is properly Ahuti. It is of interest as being the original settlement of the seven enterprising farmers of the Morasu Wokkal tribe, who migrated here from the east about the end of the fourteenth century, and founded States in the east of the Mysore country, tributary to Vijayanagar.

Bangalore.—The seat of government of the Mysore State, and head-quarters of the Bangalore Brigade of the Indian army, situated in 12° 58′ N. and 77° 35′ E., by rail 219 miles from Madras, and 692 from Bombay. Total population (1901), 159,046. It covers an area of 25 square miles, and is composed of two separate but adjacent parts: Bangalore city (the Petta, Pete, or original native town of Bangalore proper), under the Mysore State; and the Civil and Military Station (formerly called the cantonment), an 'assigned' tract under British administration through the Resident of Mysore.

Bangalore city has been largely extended of recent years, especially since the outbreak of plague in 1898, and now covers an area of 11 to 12 square miles, extending from the Imperial Service Lancer lines in the north to the Bull temple in the south, a distance of 7 miles, and from Cubbon Park in the east to Chāmrājpet in the west, about 4 miles. The population during the last thirty years has been: (1871) 60,703, (1881) 62,317, (1891) 80,285, and (1901) 69,447; the decrease since 1891 being due to plague. Hindus number 57,000, Musalmāns 8,500, and Christians 3,200; of the rest, 565 are Animists. The city is divided into nine municipal divisions: namely, Palace, Balepete, Manivartapete, Halsūrpete, Nagartapete, Lāl Bāgh, Fort, Basavangudi, and Mallesvaram. The municipal board is composed of a president, five other *ex officio* and five nominated members, appointed by the State, and thirteen elected members. The privilege of election was

granted in 1892. The income and expenditure during the ten years ending 1901 averaged 1·6 lakhs. In 1903–4 the income was 2·4 lakhs, including octroi (Rs. 55,000), house tax (Rs. 42,000), and tolls (Rs. 22,000). The expenditure was 2½ lakhs, the chief items being Rs. 87,000 for public works, Rs. 35,000 for conservancy, and Rs. 33,000 for charitable grants and education.

The name is properly Bengalūru, the *ūru* or town of *bengalu* or 'beans.' The Hoysala king Vīra Ballāla, it is said, became separated from his attendants when hunting and was benighted. Faint and weary, he came upon a solitary hut, in which was an old woman, who could give him only some *bengalu* or beans boiled in a little water. Sharing this humble fare with his horse, he passed the night at the hut. The incident soon became known, and the *ūru* or village which sprang up was called the Bengal-ūru. It was situated to the north, beyond Kodigehalli, and is now known as Old or Hale Bengalūru. Bangalore was founded in 1537 by Kempe Gauda, the chief of Yelahanka, and a watch-tower at each of the cardinal points marks the limits to which it was predicted it would extend, a prophecy now more than fulfilled. The first extension was Chāmrājpet, from the fort westwards, in 1892. In 1899 were added the Basavangudi extension, south from the fort, and the Mallesvaram extension, north from the city railway station. The fort lies south of the original town, but since 1888 has not been used for any military purpose. First constructed of mud, it was enlarged and built of stone in 1761, under Haidar Alī, captured by the British in 1791, subsequently dismantled by Tipū Sultān, but restored in 1799. The walls have now been pierced for roads, a part pulled down, and the moat filled up, providing a site for the Victoria Hospital. The most important buildings included in the city are the Mahārāja's Palace to the north, and the range of public offices in Cubbon Park. East from the fort is the Lāl Bāgh, or State Botanical gardens, which date from the time of Haidar Alī. The Central College is the principal educational institution, and a site to the north of the city has been selected for the Indian Institute of Research for post-graduate study, founded from Mr. Tata's endowment.

On the west of the city are large spinning and manufacturing mills, woollen, cotton, and silk-mills, oil-mills and soap factory, brick and tile works; southwards, a silkworm farm under Japanese management; and to the south-west, the distillery. Near the city railway station are locomotive work-

shops and an iron foundry. Near the cantonment railway station are large coffee-curing works, where also artificial manures are prepared.

The water-supply, which was provided in 1896, is pure and abundant. The water is drawn from the Hesarghatta tank on the Arkāvati, 13 miles to the north-west, and pumped to the top of a small hill at Bānavar, whence it runs by gravitation through cast-iron pipes to settling and filtering beds near the city, and thence to a subterranean reservoir at the race-course, from which it is distributed to all parts. The daily supply provides for a million gallons. The drainage of the city is collected into one main channel, which runs out from the southern side of the old town and is continued as far as the Sunnakal tank, a distance of 2 or 3 miles, where the sewage is applied to agricultural purposes. Since 1905 the city has been lighted by electricity transmitted from the Cauvery Falls at Sivasamudram, and power from the same source works the woollen and cotton-mills.

Civil and Military Station.

The Civil and Military Station of Bangalore adjoins the city on the east, and covers an area of 13 square miles, extending from the Residency on the west to Binnamangala on the east, about 4 miles, and from the Tanneries on the north to Agram on the south, about 5 miles. It is intended to remove the sapper lines to a new site on the north-west, which will allow of the congested native parts being opened out by an extension northwards, similar measures in Bangalore and Mysore having virtually freed those cities from plague. The population at each Census in the last thirty years has been: (1871) 81,810, (1881) 839,540, (1891) 100,081, and (1901) 89,599. The decrease since 1891 is due chiefly to plague, but also partly to the absence of troops in 1901 at the seats of war in South Africa and China. By religion there are 51,000 Hindus, 21,500 Musalmāns, and 17,000 Christians. The cantonment was established in 1809 on the removal here of the British garrison from Seringapatam, which had proved too unhealthy for the troops. But the head-quarters were at first in the fort, where also the principal Europeans lived. The name 'cantonment' was applied till 1881. On the rendition of Mysore in that year, the area was made over to the British as an 'assigned' tract, and under the present designation became subject to the administration of the Resident.

The garrison includes 3 batteries of artillery, and regiments of British cavalry and infantry, Native cavalry, sappers and

miners, pioneers, and Native infantry (2), mounted infantry, supply and transport corps, and mule corps. There are, besides, the Bangalore Rifle Volunteers, and, in Bangalore city, under the jurisdiction of the Darbār, the Mysore Imperial Service Lancers transport corps and the Mysore Barr infantry.

The Station municipal board has the District Magistrate as president, and is composed of 6 *ex officio* and 18 non-official members, the latter being elected. There are six divisions or wards: Halsūr (Ulsoor), Southern, East General Bazar, West General Bazar, Cleveland Town, and High Ground. The elected commissioners are so apportioned among them as to represent the several classes in each. There are thus 6 Europeans and Eurasians, 4 Muhammadans, and 8 Hindus and others. The income and expenditure during the ten years ending 1901 averaged 3·2 lakhs. In 1903–4 the income was 3·7 lakhs, including 2·4 lakhs from rates and taxes, and Rs. 85,000 from rent and fees. The expenditure was 3·5 lakhs, the chief items being 1·3 lakhs for public works, and 1·2 lakhs for medical and health department.

The water-supply is drawn from the same source as for the city, namely, the Hesarghatta tank, but by an independent system of pumping-works, filter-beds, and pipes, to a reservoir on the High Ground. The daily supply is calculated at a million and a half gallons. The drainage of a large area of the Station is carried by a sewer passing through a tunnel to some distance beyond Halsūr, where it is applied to cultivation. The most noticeable public buildings are the Residency, the District offices, and the Bowring Institute.

The 'assigned' tract occupied by the Civil and Military Station is under the control of the Resident, and is provided with the various departments of administration separate from those of the Mysore State. Revenue work is performed by the Collector and District Magistrate. For police there is a Superintendent, with 39 officers and 234 constables. The police jurisdiction extends also over railways (327 miles), for which purpose there are 18 additional officers and 118 men. The criminal courts include the bench of Honorary Magistrates, the courts of the Second Magistrate, who is the officer in charge of the Resident's Treasury, of the Railway First-Class Magistrate, who is the Superintendent of railway police, of the District Magistrate, and of the Sessions Judge, who is the First Assistant Resident. The Resident's Court is the High Court for the Station. The District Judge exercises civil jurisdiction, under the control of the Resident's Court, which in civil juris-

diction also is the High Court for the Station. There is no separate jail, prisoners under sentences not exceeding one year's imprisonment being detained in the Bangalore Central jail of the Mysore State, while others are sent to jails in the Madras Presidency. The medical institutions are under the Residency Surgeon; and the educational institutions, most of which are aided (60 with 4,877 pupils[1]), are under the departmental control of the Director of Public Instruction, Madras.

The revenue of the 'assigned' tract in 1903-4 was nearly 7½ lakhs and the expenditure over 7¾ lakhs.

Channapatna Town.—Head-quarters of the *tāluk* of the same name in Bangalore District, Mysore, situated in 12° 40′ N. and 77° 12′ E., 35 miles by rail from Bangalore city. Population (1901), 10,425. The fort, now ruinous, was probably built about 1580 by Jagadeva Rāya, who made this the capital of territory yielding a revenue of 9 lakhs of pagodas, which had been bestowed on him by the Vijayanagar king for his defence of Penukonda in 1577. He was of a Telugu Banajiga family, which rose to power in Bāramahāl in the fourteenth century. His successors ruled at Channapatna till 1630, when it was taken by Mysore. The town is north-east from the fort. It is celebrated for the manufacture of lacquered ware and toys, of fine steel wire for strings of musical instruments, and of glass bangles. It is the residence of a large number of Musalmāns of the Labbai and Daire sects, who trade with the west coast. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 4,700 and Rs. 4,900. In 1903-4 the income was Rs. 5,500, chiefly from taxes; and the expenditure was Rs. 6,400.

Closepet.—Head-quarters of the sub-*tāluk* of the same name in the Channapatna *tāluk* of Bangalore District, Mysore, situated in 12° 43′ N. and 77° 17′ E., on the Arkāvati, 28 miles by rail from Bangalore city. Population (1901), 6,099. The town was founded in 1800, being named after Sir Barry Close, the Resident, and became the head-quarters of the Bārgīr or irregular horse at that time. The Musalmāns of the place are largely engaged in the rearing of silkworms and reeling of silk. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 3,000. In 1903-4 they were Rs. 3,800.

Devanhalli Town.—Head-quarters of the *tāluk* of the same name in Bangalore District, Mysore, situated in 13° 15′ N. and 77° 43′ E., 23 miles north of Bangalore city. Population

[1] This does not include regimental schools under the military authorities.

(1901), 6,649. The fort was erected in 1501 by one of the AVATI family, and captured by the ruler of Mysore in 1749, its siege being the operation in which Haidar first came into notice. He obtained the command of one of the bastions, and here his son Tipū was born in 1753. The place was taken by the British under Lord Cornwallis in 1791. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 2,700. In 1903-4 they were Rs. 3,700 and Rs. 4,100.

Dod-Ballāpur Town.—Head-quarters of the *tāluk* of the same name in Bangalore District, Mysore, situated on the Arkāvati, in 13° 18′ N. and 77° 33′ E., 23 miles from Bangalore city. Population (1901), 7,094. So far back as the twelfth century this was an important place of trade, but the modern town was established at the beginning of the sixteenth century by the chief who also founded DEVANHALLI. Bijāpur, the Marāthās, and the Mughals in turn held it, the first giving it in *jāgīr* to Shāhji, and the last to Alī Kulī Khān. It was taken by Haidar in 1761. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 3,000. In 1903-4 they were Rs. 3,300 and Rs. 3,500.

Kānkānhalli Town.—Head-quarters of the *tāluk* of the same name in Bangalore District, Mysore, situated on the Arkāvati, in 12° 33′ N. and 77° 26′ E., 36 miles south of Bangalore city. Population (1901), 5,588. The fort was built by Jagadeva Rāya of Channapatna about 1577, and taken by the Mysore troops in 1630. Tipū twice destroyed the town to prevent its giving shelter to the British army marching on Seringapatam. The name is properly Kānakāranahalli, the village of the Kānakāra or 'landed proprietor.' To this family in 1648 was granted Channarāyapatna (Hassan District). The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 1,800 and Rs. 1,900. In 1903-4 they were Rs. 2,200 and Rs. 2,300.

Malūr.—Village in the Channapatna *tāluk* of Bangalore District, Mysore, situated in 13° 0′ N. and 77° 56′ E., on the Kanva. Population (1901), 2,515. Most of the residents are Brāhmans of the Srīvaishnava sect, who give it the name Rājendrasimha-nagara. There are several ruined temples, but a large one of Aprameyaswāmi is kept in good order. The place was of importance under the Cholas. Vijnāneswara is said to have here composed the law book *Mitākshārā*, his celebrated commentary on Yājnavalkya, its date being about 1100.

Manne.—Village in the Nelamangala *tāluk* of Bangalore District, Mysore, situated in 13° 15′ N. and 77° 18′ E. Population (1901), 748. Under the name of Mānyapura it was the residence of the Ganga kings in the eighth century. It was taken by the Cholas at the beginning of the eleventh century. The city is said to have extended over 8 miles to the east, but only some ruins of temples now remain.

Sarjāpur.—Town in the Anekal *tāluk* of Bangalore District, Mysore, situated in 12° 51′ N. and 77° 47′ E., 18 miles south-east of Bangalore city. Population (1901), 3,056. With eighteen other villages, this was formerly a *jāgīr* held from the Mughals on condition of maintaining a military force for the service of the emperor. The *jāgīr* was confirmed by the succeeding rulers, the Marāthās, Haidar Alī, and the British, but was cancelled in the time of Dīwān Pūrnaiya, who, finding that the *jāgīrdār* wanted to sell his villages, bought him out. Cotton cloths, carpets, and tape are made here. Formerly fine muslins were woven. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 1,200. In 1903–4 they were Rs. 1,400 and Rs. 2,000.

Sāvandurga.—A conspicuous fortified hill, 4,024 feet high, in the west of Bangalore District, Mysore, situated in 12° 55′ N. and 77° 18′ E. It is an enormous bare dome-shaped mass of granite, the summit consisting of two peaks separated by a chasm, each well supplied with water. It was first fortified in 1543 by an officer of the Vijayanagar kings. The chief of Bangalore next acquired it, with Māgadi, about 1570, and in his family it remained till taken by Mysore in 1728. Its capture by the British under Lord Cornwallis in 1791 was a memorable exploit. It is now deserted, and surrounded on all sides with heavy forest.

Sivaganga.—A sacred hill with a conical peak, 4,559 feet high, in the north-west of Bangalore District, Mysore, situated in 13° 11′ N. and 77° 14′ E. Its Purānic name is Kakudgiri. This was one of the points to which the new Lingāyat faith spread early in the twelfth century. The north face is covered with sacred buildings. The two finest temples, those of Gangādharesvara and Honna-Devamma, are formed out of large natural caverns, and the Pātāla Ganga is the principal of eight sacred pools on the hill. At the summit are two pillars, from beneath one of which about a quart of water oozes on the day of the winter solstice, half of which is devoted to the god, and half sent to the palace at Mysore. The

village of Sivaganga, where the *gurū* resides, is at the northern base.

Tyāmagondal.—Town in the Nelamangala *tāluk* of Bangalore District, Mysore, situated in 13° 12′ N. and 77° 18′ E., 2 miles from Dodbele railway station. Population (1901), 4,099. The town grew to its present dimensions owing to the settlement here of inhabitants who deserted Nijagal, a few miles to the north-west. It contains many merchants and traders in grain. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 2,300. In 1903–4 they were Rs. 2,700 and Rs. 2,000.

Vadigenhalli.—Town in the Devanhalli *tāluk* of Bangalore District, Mysore, situated in 13° 18′ N. and 77° 48′ E., 7 miles north-east of Devanhalli. Population (1901), 4,008. The principal trade is in cotton, and is in the hands of Nagarta merchants. The two temples of Nagaresvara and Kesava were built about fifty years ago, said to be from designs of temples at Conjeeveram. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 1,400 and Rs. 1,500. In 1903–4 they were Rs. 2,100 and Rs. 2,700.

Whitefield.—A Eurasian and Anglo-Indian settlement in the Bangalore *tāluk* of Bangalore District, Mysore, situated in 13° 0′ N. and 77° 45′ E., 2 miles south of Whitefield railway station, and 12 miles east of Bangalore city. Population (1901), 968. It is named after Mr. D. S. White, the founder of the original Association in Madras, and was established in 1882 on land granted by the Mysore State, with additional land leased by the founder from a *jodidār* of Pattandūr. There are about fifty houses, occupied mostly by pensioners, who cultivate fruit and vegetables, raise timber and grain crops, keep poultry, &c. There are Protestant and Roman Catholic churches, schools, and other institutions. The soil is good, water fairly abundant, and climate salubrious. Sausmond and Duckworth are connected colonies in the same neighbourhood, to the south.

Yelahanka.—Town in the Bangalore *tāluk* of Bangalore District, Mysore, situated in 13° 6′ N. and 77° 36′ E., by rail 10 miles north of Bangalore city. Population (1901), 2,437. It is historically interesting as one of the oldest places in the District. As Ilaipākka under the Cholas, and Elahakka under the Hoysalas, it gave its name to the surrounding country. It was the first possession of the Kempe Gauda line of chiefs,

who founded Bangalore, and became identified with Māgadi and Sāvandurga. Jaya Gauda, their progenitor, obtained the title of Yelahanka Nād Prabhu about 1420, and the place was held by his family for 230 years, when it was captured by Mysore. It became a municipality in 1870, and was converted into a Union in 1904. The receipts and expenditure during the ten years ending 1901 averaged Rs. 1,050. In 1903-4 they were Rs. 1,200 and Rs. 1,500.

Area and boundaries.

Kolār District.—District in the east of the State of Mysore, lying between 12° 46′ and 13° 58′ N. and 77° 22′ and 78° 35′ E., with an area of 3,180 square miles. It is bounded on the north by the Anantapur and Cuddapah Districts of Madras; on the east by the Cuddapah and North Arcot Districts of Madras; on the south by the Salem District of Madras; and on the west by Bangalore and Tumkūr Districts.

Physical aspects.

The District borders on the Eastern Ghāts, but touches them only on the north-east and south, between these points receding to about 15 miles from the range. The main part comprises the head of the Pālār river system on the south, and that of the Penner on the north, separated by an imaginary line from Chik-Ballāpur to Srīnivāspur. In and around Nandidroog in the north-west are the sources of the following rivers, radiating in all directions: the Arkāvati, Penner, Chitrāvati, Pāpaghni, Pālār, and Ponnaiyār. The principal chain of mountains is the range running north from Nandidroog (4,851 feet), the highest point, to Penukonda. Through the middle of the District, separated by intervals, the Tyākal and Vokkaleri hills, the Kolār hills (highest point 4,026 feet), Rahmāngarh (4,227 feet) and Ambājidurga (4,399 feet), with the Dokkalakonda, run north to the frontier. There are other lines of low hills in the east, those in the north-east inclining to a circular arrangement, enclosing elevated valleys, occupied by villages. The central and eastern parts of the District, forming the valley of the Pālār, are undulating and well cultivated. A considerable depression occurs in the valley of the Penner towards Goribidnūr, in the north-west. The outlying parts along the northern frontier mark with alternate rise and fall the descent to the level of the Anantapur country. On the east the Mugli and Naikaneri passes to the plains of the Carnatic are some distance beyond the boundary.

Geology.

The rocks of the District are for the most part similar to those of the adjoining District of Bangalore, being composed of gneiss, but with a smaller admixture of mica and a paler

felspar. The rock of Nandidroog is almost a solid monolithic mass of granite, rising 1,800 feet above the plain. The low hills which lie across the course of the Pālār and run south through the Bowringpet *tāluk* are composed of a soft ferruginous clay slate. They have flat tops and are mostly barren, though the soil about them is composed of fine argillaceous red earth. The Kolār auriferous band of schists runs north and south for about 40 miles, with a maximum width of about 4 miles. In the southern portion are situated the Kolār Gold Fields. The band is composed essentially of hornblende rocks, usually schistose, and some well-marked layers of ferruginous quartz rocks. Recent opinion favours the view that the hornblende schists which form the main mass of the band are metamorphosed basic lava-flows. There is evidence tending to show that the surrounding granites and gneisses are largely intrusive with regard to the schists.

The indigenous flora is similar to that of Bangalore District. Botany. The numerous fine tanks are favourable to aquatic genera. Partly in and partly out of the water are found many species of reeds. Clinging to the tank embankments and upper level margins are *Pongamia glabra* and other moisture-loving plants. The hill flora is well represented in the Nandidroog range. Nearly all the plants on the plain ascend the slopes of the hill to varying heights, some to the very summit. These are intermixed with species rarely or never found on the plain. The plateau on the top, enclosed by the fort walls, contains a peculiarly mixed flora of Maidān, Malnād, and domesticated plants. Quite the commonest tree is *Eugenia Jambolana*, and there are some fine specimens of *Michelia Champaca*. Eucalyptus and casuarina have grown well. The Gold Fields are situated between low ranges of stony hills, the valley being naturally bleak and dreary in appearance, with the poorest vegetation. But since mining operations were started, avenues of trees, such as various species of *Ficus*, *Melia*, &c., have been planted, and gardens well stocked with flowering plants usual among English residents have sprung into existence. The most successful, however, are those formed in soil laid down for the purpose.

The climate does not differ materially from that of Bangalore Meteorology. District, but the rainfall is somewhat less, and depends more on the north-east monsoon than on the south-west. The country is generally healthy, remarkably so in the neighbourhood of Chik-Ballāpur and Kolār, but plague has been severe in the former. Cholera and other epidemics which used fre-

quently to prevail in the District, owing to crowds of travellers and especially pilgrims to and from Tirupati constantly passing through, have been reduced to a minimum by the diversion of this traffic to the railway. The dangers arising from the recent large influx of labourers to the gold-mines are kept well under control by the Sanitary Board. The annual rainfall averages nearly 29 inches, 11 inches of the whole falling in September and October. Chik-Ballāpur and Mulbāgal get more than the average, and Bāgepalli less. The mean annual temperature is about 75°, with a maximum of 95° in April and May, and a minimum of 57° in February.

History. The earliest rulers of whom there is an authentic account were the Mahāvalis or Bānas, who held the east of the District. They claim descent from Mahā Bali, or Bali the Great, a Daitya king who by his penance had acquired such power that he defeated Indra and dominated the world. In order to put him down Vishnu assumed the Vāmana or Dwarf incarnation. Bāna, or Bānāsura, was Bali's son, and had a thousand arms. His daughter was seduced by Krishna's grandson, and a war ensued. Siva guarded the gates and fought for Bānāsura, who worshipped him with his thousand hands. But Krishna found means to overthrow Siva, and having taken the city, cut off Bānāsura's hands, except two, with which he obliged him to do homage. The Mahāvalis may have been connected with Mahābalipur, known as the Seven Pagodas, on the coast south of Madras. They continued in power, being also called Bānas, till the tenth century, but for a long time had the Pallavas as over-lords. Their later capital was Paduvipuri (perhaps Padavedu in North Arcot). During their time Avani was an important sacred place, the seat of a Brāhman community. The Vaidumbas also appear in a few inscriptions in the north. The Pallavas were rulers over the whole of the Telugu country and over the Tamil country as far as Trichinopoly. Their capital was originally at Vengi, but from an early period was established at Kānchi (Conjeeveram). From the second to the eleventh century all the west of the District was included in the kingdom of the Gangas, who had the titles 'Lord of Kuvalāla-pura' (Kolār) and 'Lord of Nandagiri' (Nandidroog). They were succeeded about 998 by the Cholas, who gave the District the name of Nikarilichola-mandala. About 1116 the Cholas were driven out of the Mysore country by the Hoysalas, the eastern boundary of whose kingdom was at Nangali. When in 1254 a partition of the Hoysala territories took place between the two sons of Somesvara, Kolār District went with the

Tamil country to Rāmanātha. But the kingdom was again united in the next reign under the Hoysala king, Ballāla III. During the Vijayanagar dominion Mulbāgal was the seat of government for the District. At the close of the fifteenth century Sāluva Narasimha, a powerful chief of Karnāta and Telingāna, and general of the Vijayanagar forces, stopped in Kolār District the invasion of the Bahmani Sultān, who was overrunning the whole of the Vijayanagar territories. Narasimha himself then usurped the throne of Vijayanagar. Under the later Vijayanagar kings, Tamme Gauda, one of the chiefs of the Avati family, established himself at Sugatūr, and for his military services gained the title of Chikka Rāyal and the possession of the east of the District. Another of these chiefs in 1476 founded the Chik-Ballāpur State in the west, which was supported in the eighteenth century by Morāri Rao, the Marāthā chief of Gooty. In the seventeenth century the District was subdued by Bijāpur, and made part of the *jāgīr* of Shāhji. The Mughals afterwards held it for seventy years, attaching it to the province of Sīra. During this period Fateh Muhammad, the father of Haidar Alī, became Faujdār of Kolār. It next passed into the hands of the Marāthās, of the Nawāb of Cuddapah, and then of Basālat Jang, chief of Adoni and brother of the Nizām. He in 1761 ceded Kolār and Hoskote to Haidar Alī. Mulbāgal and Kolar were held for a time by the British in 1768. In 1770 the Marāthās again seized the District, but it was recovered by Haidar. In 1791 it was a second time taken by the British, but restored to Mysore at the peace of 1792.

Avani, Betmangala, and Tekal contain memorials of antiquity. At Nonamangala, south of Mālūr, were discovered in 1897 the foundations of a Jain temple, with inscribed plates of the fourth and fifth centuries, and a number of images, musical instruments, and other articles. The ancient temples of Nandīsvara at Nandi and Kolāramma at Kolār are of interest. There is some fine carving in the former. In their present form they are of the Chola period, dating from early in the eleventh century. At Kolār is also the Imāmbāra or mausoleum of Haidar Alī's family. The numerous inscriptions of the District have been translated and published. Archaeology.

The population was 646,837 in 1871, 481,191 in 1881, 591,113 in 1891, and 723,600 in 1901. The fall in 1881 was due to the famine of 1876–8. By religion, in 1901, there were 663,940 Hindus, 43,149 Musalmāns, 9,605 Christians, 6,019 The People.

Animists, 880 Jains, and 7 'others.' The density of population was 228 per square mile, that for the whole State being 185. The Kolār Gold Fields (population, 38,204) is the only place with more than 20,000 inhabitants. The headquarters of the District are at Kolār.

The following are the principal statistics of population in 1901 :—

Tāluk.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Kolār	283	1	334	75,648	267	+ 4·1	4,747
Mulbāgal	327	1	351	66,899	205	+ 17·6	3,112
Bowringpet	337	2	409	128,193	381	+ 80·6	9,532
Mālūr	267	1	374	61,908	232	+ 14·3	2,598
Sidlaghatta	329	1	353	70,022	213	+ 17·6	3,074
Chik-Ballāpur	250	1	266	56,057	224	+ 8·7	2,697
Goribidnūr	343	1	268	83,296	243	+ 15·7	3,731
Bāgepalli	447	2	372	65,621	147	+ 13·0	2,169
Chintāmani	272	1	341	57,144	210	+ 19·9	2,724
Srīnivāspur	325	1	341	58,812	181	+ 23·8	2,521
District total	3,180	12	3,409	723,600	228	+ 22·4	36,905

Castes and occupations.

The Wokkaligas or cultivators, 181,000, are the most numerous caste; the outcaste Holeyas and Mādigas number 91,000 and 48,000; Bedas, variously employed, 56,000; Banajigas or traders, 46,000; Kurubas or shepherds, 39,000; and Woddas or stonemasons, 30,000. Brāhmans number 26,000, and Lingāyats 11,000. Of Musalmāns, 26,000 are Shaikhs, 7,300 Saiyids, and 6,000 Pathāns. Nomad Koracha and Korama number 3,700, and Lambānis 1,000. According to occupations, 13 per cent. of the population are engaged in unskilled labour not agricultural, nearly a third of them at the Gold Fields; 11 per cent. are engaged in the preparation and supply of material substances; and 62 per cent. in agriculture and pasture.

Christian missions.

The number of Christians is 9,600, of whom 7,000 are at the Gold Fields. French Jesuits opened a Telugu mission in Chik-Ballāpur and other places in 1702, and the Italian miners at the Gold Fields are mostly Roman Catholics. There are also Anglican and Wesleyan churches for the mining population. Of Protestant missions, the London Mission has stations at Chik-Ballāpur, Mālūr, and other places; the American Methodist Episcopal Mission has a station at Kolār, where they have a large industrial school.

General agricultural conditions.

The soil on the high grounds is red and gravelly, with very often rocks of gneiss or granite, of little cohesion, appearing on the surface. The lower parts of these high grounds are intersected by nullahs or deep ravines, torn by the torrents of water precipitated from the heights in the rainy season. The tops of the ridges are usually very barren, producing nothing but small jungle. The soil in the valleys is a good loamy mixture, formed of the finer particles of the decomposed rocks, washed down and deposited during the rains. On the first ascent from the valley the soil is of a middling quality, suited for 'dry' crops, being a mixture of loam, sand, and oxide of iron, with a proportion of vegetable and animal matter. Higher up, towards the top of the ridge, a siliceous sand prevails in the soil, which is on that account adapted only for horse-gram. Below the superficial soil there is commonly a bed of gravel, which immediately covers a gneissic or granitic rock, very often in a state of disintegration considerably advanced.

Chief agricultural statistics and principal crops.

The following table gives statistics of cultivation in 1903–4:—

Tāluk.	Area in square miles, shown in the revenue accounts.				
	Total.	Cultivated.	Irrigated.	Forests.	Cultivable waste.
Kolār	236	79	19	3	15
Mulbāgal	291	87	17	24	36
Bowringpet	282	98	13	31	28
Mālūr	213	83	15	6	11
Sidlaghatta	285	78	13	4	19
Chik-Ballāpur	217	60	10	70	27
Goribidnūr	314	103	28	1	60
Bāgepalli	429	128	32	50	44
Chintāmani	256	67	67	...	15
Srīnivāspur	311	82	20	44	18
Total	2,834	865	234	233	273

The cultivated products are similar to those of Bangalore District, but owing to the large number of tanks there is a greater proportion of 'wet' and garden cultivation. The following are the areas, in square miles, occupied by the principal crops in 1903–4: *rāgi*, 430; rice, 96; gram, 83; other food-grains, 170; oilseeds, 38; sugar-cane, 18. Potatoes are extensively cultivated in the rich valleys of the Chik-Ballāpur and Sidlaghatta *tāluks*. Poppy cultivation, now prohibited, was formerly a source of great profit to the ryots. A little coffee is grown at Nandidroog, and mulberry in the Chik-Ballāpur, Sidlaghatta, and Kolār *tāluks*.

Agricultural loans. During the twelve years ending 1904 loans for land improvement amounted to Rs. 9,500. For irrigation wells 1·85 lakhs were advanced, and Rs. 8,500 for field embankments.

Irrigation. There are 3 square miles supplied by channels, 171 by tanks and wells, and 60 irrigated from other sources. The number of tanks is 3,861, of which 483 are 'major.'

Forests. The area occupied by State forests in 1903–4 was 135 square miles, by 'reserved' lands 80, and by plantations 18. The forest receipts amounted to Rs. 47,000, the principal items being firewood and charcoal.

Mines and quarries. The gold-mines in the Bowringpet *tāluk* of Kolār District yield nearly all the gold produced in India. There were 11 mines in operation in 1904, the produce for the year being 607,500 ounces, valued at more than 2¼ millions sterling. The prevailing gneissose stone is quarried for building, and for road metal. Near Sidlaghatta is a special kind of laterite. At Rahmān Garh there is an exudation of earth-oil at a certain season.

Arts and manufactures. Apart from industries connected with the gold-mines, there is a sugar factory at Goribidnūr, and a good industrial school with workshops at Kolār, belonging to the American Methodist Episcopal Mission. The silk industry is general among Muhammadans in the Kolār, Sidlaghatta, and Chik-Ballāpur *tāluks*. There are reported to be 248 small works for reeling silk, 2,192 looms for cotton cloth, 1,421 for blankets, and 61 for other fibres. Wood-works number 242, iron-works 174, brass and copper 48. There are also 293 oil-mills, and 209 sugar and jaggery mills. Mulbāgal is noted for the excellence of its sugar.

Commerce and trade. The greatest commercial centres are the Gold Fields, and Bowringpet connected with them. Their large population, both European and native, gives rise to considerable trade. Next to gold, the most valuable articles of export are sugar, sugar-candy, jaggery, and molasses; then cotton cloths and native blankets. Apart from machinery and articles for the gold-mines, the principal imports are salt, ropes, baskets, and paper.

Means of communication. The Bangalore branch of the Madras Railway runs through the District from west to east to Bowringpet, and then south-east, with a length of 56 miles. From Bowringpet the Gold Fields Railway runs for 10 miles east and south through the mining properties. A light railway has been projected from Bangalore to Chik-Ballāpur. The length of Provincial roads is 193 miles, and of District fund roads 385 miles.

Since the great famine of 1876–8 scarcity has prevailed on various occasions, as in 1884–5 and 1891–2. In 1896–7 prices of food-grains rose abnormally high, owing to large exports to the neighbouring British Districts where there was widespread distress. Half the assessment on waste 'wet' lands was remitted as a measure of relief. In 1900 test works were started in the Bāgepalli *tāluk*, but the necessity for them soon disappeared. The south-east *tāluks* and Bāgepalli were affected by drought in 1905, the cattle suffering most. Famine.

The District is divided into ten *tāluks*: Bāgepalli, Bowringpet, Chik-Ballāpur, Chintāmani, Goribidnūr, Kolār, Mālūr, Mulbāgal, Sidlaghatta, and Srīnivāspur. The Deputy-Commissioner is the head of the District, and under him the following three groups of *tāluks*, in charge of Assistant Commissioners, were formed in 1903: Kolār, Chintāmani, and Srīnivāspur, with head-quarters at Kolār; Chik-Ballāpur, Goribidnūr, Bāgepalli, and Sidlaghatta, with head-quarters at Chik-Ballāpur; Bowringpet, Mālūr, and Mulbāgal, with head-quarters at Kolār. Divisions.

The District and Subordinate Judge's courts at Bangalore have jurisdiction over Kolār District, and there are Munsifs' courts at Kolār, at the Gold Fields, and at Chik-Ballāpur. The District is comparatively free from serious crime. Judicial.

The land revenue and total revenue are shown below, in thousands of rupees:— Land revenue.

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . .	8,63	11,02	13,45	14,16
Total revenue . .	9,69	15,47	22,92	24,38

The revenue survey and settlement were introduced in the west and north between 1880 and 1885, and in the east and south between 1887 and 1890. The incidence of land revenue per acre of cultivated area in 1903–4 was Rs. 2–1–11. The average assessment per acre on 'dry' land is Rs. 1–5–5 (maximum scale Rs. 2–12–0, minimum scale Rs. 1–1–0); on 'wet' land, Rs. 5–10–10 (maximum scale Rs. 9, minimum scale Rs. 8); and on garden land, Rs. 5–12–9 (maximum scale Rs. 16, minimum scale Rs. 2).

In 1903–4 there were eleven municipalities—namely, Kolār, Sidlaghatta, Mulbāgal, Chik-Ballāpur, Mālūr, Srīnivāspur, Bowringpet, Goribidnūr, Chintāmani, Gudibanda, and Bāgepalli—with a total income of Rs. 54,000 and an expenditure of Rs. 51,000, besides the Special Sanitary Board for the Gold Local boards.

Fields. Outside the areas administered by the are managed by the District and *tāluk* boards, income of Rs. 82,000 in 1903–4, chiefly derive of the Local fund cess, and which spent Rs. 75 Rs. 47,000 on roads and buildings.

Police and jails.

The special police force for the Gold Fiel under KOLĀR GOLD FIELDS. Its authority ex Mulbāgal, Mālūr, and Bowringpet *tāluks*. The includes 2 superior officers, 18 subordinate 359 constables. There are 12 lock-ups, cont average of 41 prisoners.

Education.

In 1901 the percentage of literate persons w Gold Fields and 4·7 in the District (9·3 males an The number of schools has risen from 358 with in 1890–1 to 453 with 13,689 pupils in 1900– there were 413 schools (320 public and 93 12,046 pupils, of whom 1,853 were girls.

Medical.

Besides the hospitals at Kolār town and the there were 7 dispensaries in 1904, in which 126,00 treated, including 875 in-patients, there being 30 for men and 28 for women. The total ex Rs. 38,000.

Vaccination.

The number of persons vaccinated in 1904 14 per 1,000 of the population.

Kolār Tāluk.—Central *tāluk* of Kolār Dis lying between 13° 2′ and 13° 18′ N. and 77° 56′ with an area of 283 square miles. The populatio 75,648, compared with 72,543 in 1891. The one town, KOLĀR (population, 12,210), the and 334 villages. The land revenue demand i Rs. 1,71,000. The Pālār river runs along the e while the west is occupied by the Kolār and V The *tāluk* is generally well cultivated, even the the Kolār hills. There are numerous large tan especially in the south. The 'dry' crop soil i mixed with sand. In the north-east is some bla worms are reared in many of the villages.

Mulbāgal Tāluk.—Eastern *tāluk* of Kolār Dis lying between 13° 1′ and 13° 22′ N. and 78° 14′ a with an area of 327 square miles. The populatio 66,899, compared with 56,269 in 1891. The t one town, MULBĀGAL (population, 6,562), the and 351 villages. The land revenue demand in Rs. 1,60,000. The Pālār river runs along the

of the west border, and the streams flow to this below the Ghāts. A range of hills runs north from Mulbāgal, and over the *tāluk* generally gneissic rocks and boulders crop up everywhere. The west is open rolling country, the east broken and steep. Tanks and wells are numerous, with water close to the surface. The 'dry' crop soil is poor, grey, and sandy. The 'wet' lands contain much sand and clay, often with efflorescences of potash. The best cultivation is towards the north-east.

Bowringpet. — South-eastern *tāluk* of Kolār District, Mysore, lying between 12° 46′ and 13° 5′ N. and 78° 6′ and 78° 29′ E., with an area of 337 square miles. The population in 1901 was 128,193, compared with 71,042 in 1891. The *tāluk* contains two towns, KOLĀR GOLD FIELDS (population, 38,204), and Bowringpet (2,893), the head-quarters; and 409 villages. The land revenue demand in 1903–4 was Rs. 1,38,000. The Pālār river runs through the east, forming the large Betmangala and Rāmasāgara tanks. The west is crossed from north to south by the low flat hills of the Kolār auriferous band, west of which is a stream running south to the Ponnaiyār. The southern border abuts upon the Eastern Ghāts, and is rugged and jungly. The entire aspect of the region has been changed, especially since 1885, by the success of the gold-mines, and what was a desolate waste has become a great industrial centre.

Mālūr.—South-western *tāluk* of Kolār District, Mysore, lying between 12° 48′ and 13° 11′ N. and 77° 51′ and 78° 8′ E., with an area of 267 square miles. The population in 1901 was 61,908, compared with 54,180 in 1891. The *tāluk* contains one town, Mālūr (population, 3,632), the head-quarters, and 374 villages. The land revenue demand in 1903–4 was Rs. 1,21,000. The *tāluk* lies on the watershed separating the Pālār and Ponnaiyār rivers. The high-lying tracts are bare or covered with low jungle. The north-east is the most fertile part, watered by streams flowing west to the Ponnaiyār. There are many large tanks. Good potatoes are grown. The soil is red and comparatively deep, mixed with sand, in the south-west; in the east it is grey and shallow, being similar in the south, where many rocks crop up.

Sidlaghatta Tāluk.—Central *tāluk* of Kolār District, Mysore, lying between 13° 13′ and 13° 41′ N. and 77° 48′ and 78° 8′ E., with an area of 329 square miles. The population in 1901 was 70,022, compared with 58,977 in 1891. The *tāluk* contains one town, SIDLAGHATTA (population, 7,638), the

head-quarters, and 353 villages. T
in 1903–4 was Rs. 1,44,000. The F
tāluk to the north-east. The Ponna
angle, forming some large tanks. Th
rugged, and the soil poor and stony,
the river. South of Sidlaghatta the s
are grown.

Chik-Ballāpur Tāluk.—Western
Mysore, lying between 13° 20′ and 13
77° 52′ E., with an area of 250 squar
in 1901 was 56,057, compared with 51
contains one town, Chik-Ballāpur
head-quarters, and 266 villages. Th
in 1903–4 was Rs. 96,000. This is a
Nandidroog range running along the w
with the head-waters of seven rivers
east is of great fertility, specially favou
of sugar-cane. The north-east abour
broken ground.

Goribidnūr.—North-western *tāluk*
lying between 13° 25′ and 13° 47′ N. an
with an area of 343 square miles. Th
83,296, compared with 71,990 in 18
one town, Goribidnūr (population, 2,
and 268 villages. The land revenue
Rs. 1,60,000. The Penner river runs
south-east to north, and is joined bey
by the Kumadvati or Kundār, running
the west. The Penner is flanked by th
the east, and by the hills from Mākali-
level of the *tāluk* is much lower than t
parts. The soil is loose and fertile,
town. Shallow wells, which never f
sides being protected from falling in by
cane, rice, turmeric, and ground-nuts
with coco-nut and areca-nut palms
wild custard-apple is abundant on th
ore is plentiful.

Bāgepalli.—Northern *tāluk* of Ko
cluding the sub-*tāluk* of Gudibanda, ar
and 13° 58′ N. and 77° 39′ and 78° 8
square miles. The population in 190
with 58,086 in 1891. The *tāluk* contain
(population, 2,384) and Bāgepalli (1,

and 372 villages. The land revenue demand in 1903-4 was Rs. 1,47,000. The centre is crossed from north to south by the Dokkala-konda hills, and is covered with low jungle. The east drains to the Pāpaghni, which forms the large Vyāsa-samudra tank, and runs a little beyond the border, receiving in the north-east a stream called the Vandaman from the centre. The west is watered by the Chitrāvati, which is dammed for some small channels. Iron ore is found and largely manufactured. There is a good breed of sheep.

Chintāmani.—Central *tāluk* of Kolār District, Mysore, lying between 13° 18′ and 13° 40′ N. and 77° 57′ and 78° 13′ E., with an area of 272 square miles. The population in 1901 was 57,144, compared with 49,888 in 1891. The *tāluk* contains one town, Chintāmani (population, 2,430), the head-quarters, and 341 villages. The land revenue demand in 1903-4 was Rs. 1,22,000. The northern half is a stony tract, but with good tanks and wells. The southern half is an open rolling country of red soil. Sugar-cane thrives well, and the *rāgi* grown here is superior. Blankets and coarse cloth are made in some parts, and a finer cloth for *kamarbands*. Gunny for sacking is woven at Dimbala and Ronūr.

Srīnivāspur.—North-eastern *tāluk* of Kolār District, Mysore, lying between 13° 12′ and 13° 36′ N. and 78° 6′ and 78° 24′ E., with an area of 325 square miles. The population in 1901 was 58,812, compared with 46,463 in 1891. The *tāluk* contains one town, Srīnivāspur (population, 3,153), the head-quarters, and 341 villages. The land revenue demand in 1903-4 was Rs. 1,42,000. The south is drained by the Pālār river and the north by the Pāpaghni. On the north and north-east are ranges of hills connected with the Eastern Ghāts. In the south-east rise the low flat hills marking the Kolār auriferous band.

Ambājidurga.—Detached hill, 4,399 feet high, in the Chintāmani *tāluk* of Kolār District, Mysore, situated in 13° 25′ N. and 78° 3′ E. It was fortified by Tipū Sultān, but was taken by the British in 1792.

Avani.—Sacred village and hill in the Mulbāgal *tāluk* of Kolār District, Mysore, situated in 13° 6′ N. and 78° 20′ E. Population (1901), 949. The region is said to be Avāntika-kshetra, one of the ten places of greatest sanctity in India. Vālmīki is believed to have lived at Avani, and Rāma to have encamped here on his return from Ceylon. Inscriptions call it the 'Gayā of the South.' There is a group of temples dedicated to Rāma and his brothers, and many old inscriptions

have been found. Avani was ruled for forty years to 961 by Tribhuvanakartar-Deva, who built fifty temples and made tanks. It is the residence of a *gurū* of the Smārta sect, and the scene of a great annual festival and fair.

Betmangala.—Old town in the Bowringpet *tāluk* of Kolār District, Mysore, situated in 13° 0′ N. and 78° 20′ E., on the south bank of the Pālār, 6 miles east of the Kolār Gold Fields. Population (1901), 1,186. The name is a contraction of Vijayāditya-mangala, derived from the Bāna king, who was probably its founder. Two old inscribed stones, with dates 904 and 944, are worshipped under the name of Gangamma. The large tank gave way and was repaired about 950 under the Pallava Nolamba kings. It burst again and was restored after a long time in 1155 under the Hoysala kings. The embankment failed in 1903; but the tank has now been taken up for the water-supply of the Kolār Gold Fields, to furnish the mines with a million gallons a day, capable of increase by half a million if necessary. The town lost its importance on the opening of the railway in 1864, which diverted the former large passenger traffic, and it declined still further on the removal of the *tāluk* head-quarters to the newly formed town of Bowringpet.

Būdikote.—Village in the Bowringpet *tāluk* of Kolār District, Mysore, situated in 12° 54′ N. and 78° 8′ E., 8 miles south-west of Bowringpet. Population (1901), 1,460. There is a Bāna inscription of the ninth century. Būdikote was the birthplace of Haidar Alī, and formed the *jāgīr* of his father Fateh Muhammad on his appointment as Faujdār of Kolār under the Sūbahdār of Sīra.

Channarāyan Betta.—Hill, 4,762 feet high, one of the Nandidroog group, in the Chik-Ballāpur *tāluk* of Kolār District, Mysore, situated in 13° 23′ N. and 77° 44′ E. The Penner rises on the west, and the Ponnaiyār on the east. There are traces of a fort on the top, and the forest on the slopes is 'reserved.' The temple of Channa Rāya is in a large cave on the west side.

Chik-Ballāpur Town.—Head-quarters of the *tāluk* of the same name in Kolār District, Mysore, situated in 13° 26′ N. and 77° 44′ E., 22 miles north-east of Dod-Ballāpur railway station. Population (1901), 5,521, a decrease from 10,623 in 1891, owing chiefly to plague. Chikka or Little Ballāpur is so called to distinguish it from Dodda or Great Ballāpur. It is at the eastern base of the Nandidroog range, and was founded about 1479 by a chief of the Morasu Wokkaliga refugees at

Avati. In this family it continued, being tributary to Vijayanagar, until taken by Haidar Alī. The London Mission have an out-station here. There is a native iron foundry, and the silk industry is largely pursued. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 8,100 and Rs. 7,700. In 1903–4 they were Rs. 11,000 and Rs. 10,000. A light railway has been proposed to connect Chik-Ballāpur with Bangalore.

Gummanāyakanpālya.—Village in the Bāgepalli *tāluk* of Kolār District, Mysore, situated in 13° 18′ N. and 77° 55′ E., 10 miles east of Bāgepalli. Population (1901), 207. It is a small fortified circular rock in the midst of jungle, and was founded about 1350 by a Beda chief, after whom it is named. He and his brother maintained a band of freebooters from Cuddapah, on condition of receiving half the plunder they gained. Settlers were also encouraged by liberal terms. By 1412 an orderly government was introduced, and the robbers withdrew. In the next century the place became tributary to Vijayanagar, and it remained in the same family till taken by Haidar Alī.

Kolār Town.—Head-quarters of the District and *tāluk* of Kolār, Mysore, situated in 13° 8′ N. and 78° 8′ E., 11 miles north of Bowringpet railway station. Population (1901), 12,210. Kolār is a place of great antiquity, but little now remains in it that is ancient. The original form of the name was Kuvalāla, contracting to Kolāla. The Gangas from early in the Christian era bore the title 'Lord of Kuvalāla.' The present Kolāramma temple was erected by Rājendra Chola in the beginning of the eleventh century, when the Cholas overthrew the Ganga power. Early in the next century Kolāla was taken by the Hoysala king, who drove the Cholas out of Mysore. When the Hoysala dominions were partitioned for a time in the second half of the thirteenth century, Kolār went with the Tamil districts to Rāmanātha. In the fifteenth century, under Vijayanagar, Tamme Gauda, with the title of Chikka Rāyal, obtained authority to repair the fort. The king of Bijāpur next subdued the place, and in 1639 it was a part of the *jāgīr* given to Shāhji, father of Sivajī. The Mughals took it fifty years later, and about 1720 Fateh Muhammad, father of Haidar Alī, became Faujdār of Kolār under the Sūbahdār of Sīra. After various fortunes, Kolār was ceded to Haidar Alī in 1761. In 1768 it was taken by the British, in 1770 by the Marāthās, in 1791 again by the British, and at the peace of 1792

restored to Mysore. The Makbara, or tomb of Haidar Alī's father, is one of the principal old buildings, and is maintained by an endowment. The fort walls were levelled some years ago and the ditch was filled up. Many new streets were laid out at the same time. Before the opening of the railway in 1864, Kolār was the great place of passage to and from Madras. Scorpions abound, and a pit under the entrance to the Kolāramma temple is kept full of them. A silver scorpion is one of the customary offerings. Mulberry is grown for the rearing of silkworms. Turkeys are reared in large numbers for export to Bangalore and other European centres. Coarse woollen blankets are woven. The Methodist Episcopal Mission has an orphanage and industrial school. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 4,000. In 1903–4 they were Rs. 12,000.

Kolār Gold Fields.—City in the south-east of Kolār District, Mysore State, situated on a branch railway (10 miles long) from Bowringpet, between 12° 50′ and 13° 0′ N. and 78° 18′ and 78° 21′ E., to the east of a low ridge of hills, of which Betarāyan (3,199 feet) is the most conspicuous point. Area, 15 square miles. Population (1901), 38,204. In 1891 the population was only 7,085, and the whole city has come into being since 1887.

The existence of gold in this region had long been known, and there were traces of old workings. Mining was attempted, but without success, in the time of Tipū Sultān, and in 1802 Lieut. Warren examined and reported upon this gold tract. In 1873 Mr. M. F. Lavelle obtained from the Mysore government exclusive mining rights for twenty years, and sank a shaft near Urigam in 1875. But finding that large capital was needed for carrying on the work, he transferred his rights in 1876, with the approval of the government, to a syndicate known as the Kolār Concessionaires, to whom 20 square miles were leased for thirty years on more favourable terms. In 1881 the aid was secured of Messrs. John Taylor & Sons, mining engineers in London; and Captain B. D. Plummer, a miner of great experience, commenced operations at the Nundydroog mine. These came to an end for want of funds in 1883, and the outlook for the whole field was of the gloomiest. The Mysore mine still had £13,000 left. On the strong advice of Mr. John Taylor, Captain Plummer was sent out as a forlorn hope in December, 1883, to do the best he could with this amount. Before long he had the good fortune

to discover the Champion lode, and by 1885 the success of the Kolār gold-field had been established. Many changes had meanwhile been made in the terms of leases, which had the effect of both encouraging the industry and giving the State a legitimate share in the profits. The Kolār Gold Fields now yield nearly all the gold produced in India, and some of the mines are among the richest in the world. To the end of 1904 the total value of gold produced was 21 millions sterling, and there had been paid in dividends 9 millions, and in royalty to the State one million. The nominal capital of the eleven companies at work at the end of 1904 was $2\frac{1}{2}$ millions sterling, valued in the London market at about $9\frac{1}{2}$ millions. Of these companies, five (Mysore, Champion Reef, Ooregum, Nundydroog, and Balaghat) paid dividends, and five produced gold but paid no dividends. The dividends paid by the first five averaged 74 per cent. on their paid-up capital, but for individual companies it came to 145 per cent. for the first and 169 for the second. The number of persons employed in 1904 was 510 Europeans, 415 Eurasians, and 27,000 natives. The wages paid in the year amounted to $70\frac{1}{4}$ lakhs or £470,000.

The following improvements have been carried out by the State for the promotion of the Gold Fields. In 1894 was opened the branch railway from Bowringpet junction, passing through the mines. In 1899 a Sanitary Board was formed, composed of three *ex officio* and four non-official members, the latter nominated by the Mining Board and approved by the State. The Special Magistrate is *ex officio* president. In 1900 the Gold Fields were formed into a separate police district, together with the Bowringpet, Mālūr, and Mulbāgal *tāluks*. A number of Sikhs and Punjābis have been recruited, and in 1904 the force consisted of a European Superintendent, 50 subordinate officers, and 726 constables. The number of grave crimes reported was 488, of which 70 per cent. were detected. Co-operating with this force, specially for prevention of gold thefts, are also 6 European supervisors, with 315 native watchmen under them, and 4 Punjābi *jemadārs*, with 125 Punjābi watchmen. In the middle of 1902 the Cauvery power scheme commenced supplying electric power to the mines from the Cauvery Falls at Sivasamudram, 92 miles distant. Since August, 1902, there has been uninterrupted transmission of 4,185 horse-power. So satisfactory have been the results that a further supply of 2,500 horse-power, applied for by the mining companies, was installed in 1905, and 2,000 additional to this is being arranged for. The power is also

being applied to the working of saw-mills at the mines. A scheme for an efficient water-supply, drawn from the Betmangala tank on the Pālār river, 6 miles to the east, was finished in 1905. The water, filtered by the Jewel system, is pumped to a reservoir at the new town, and each mine can draw its supply from the main laid through the fields. The State undertakes to supply a million gallons a day to the mines, and an additional half-million if found necessary. Churches, a club, an hotel, large shops, &c., had been erected at various times, but since 1895 the necessity of laying out a new town for the population of the Gold Fields was recognized. Roads and wells were gradually made, and land acquired. In 1901 a final plan was adopted for the town (since named Robertsonpet, after a former Resident), which extends north and south to the east of the Gold Fields. Connected with it are cooly colonies, providing sanitary dwellings for the workpeople. Between the residential and bazar sites has been reserved an open space for a park or public garden.

Mulbāgal Town.—Head-quarters of the *tāluk* of the same name in Kolār District, Mysore, situated in 13° 10′ N. and 78° 24′ E., 18 miles east of Kolār town. Population (1901), 6,562. The name, originally Muluvāyi, is Mulu-bāgal, in Sanskrit Kantakadvāra, 'thorn-gate.' There is a Srīpādarāya *math* of the Mādhva sect here, and the tomb of a saint named Haidar Walī attracts many Musalmāns to the celebration of his anniversary. Pilgrims to Tirupati from the west shave their heads and bathe in the Narasimha-tīrtha as a preliminary purification. Mulbāgal sugar and Mulbāgal rice are considered the best in the District. The former is prepared by Muhammadans employed by Brāhmans. Under Vijayanagar rule the town was at first the seat of government for the Kolār territory, and afterwards belonged to the Sugatūr family. It was taken by the British in 1768 and 1791, but restored to Mysore at the peace of 1792. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 3,100. In 1903–4 they were Rs. 4,000 and Rs. 3,600.

Nandi.—Village in the Chik-Ballāpur *tāluk* of Kolār District, Mysore, situated in 13° 23′ N. and 77° 42′ E., at the north-east base of Nandidroog, 5 miles south of Chik-Ballāpur. Population (1901), 1,315. The temple of Bhoga Nandīsvara dates at least from the Chola period, the beginning of the eleventh century, but in the courtyard is a Pallava inscription 200 years older. A British military station was established

here from 1799 to 1808. The soil around is very fertile. Excellent potatoes and sugar used to be produced, with all kinds of European and other fruits and vegetables. A great annual fair is held at the Sivarātri, when the best bullocks reared in the country are brought for sale. West of the village is a small hill, with Haidar's Drop, over which condemned prisoners were thrown. East of the village is the mosque mentioned in Meadows Taylor's novel *Tippoo Sultaun*, the opening scenes of which are laid at Nandi.

Nandidroog.—Famous fortified hill, 4,851 feet high, in the west of Kolār District, Mysore, situated in 13° 22′ N. and 77° 41′ E. It is the highest point in the east of the State, and lies at the termination of a range of hills running north to Penukonda and the Bellary District of Madras. On the top is an extensive plateau sloping to the west, in the centre of which is a large hollow containing a wood, and a tank called the Amrita-sarovara or 'lake of nectar,' faced on the four sides with stone steps. Except on the west, where it is partially united with the adjoining range, the hill presents a nearly perpendicular rocky face, being in fact an almost insulated monolithic mass of granite. The Pālār river has its reputed source at the top, in a well on the east, and the Arkāvati in a well on the west. The lower sides of the hill are clothed with forest. From the second to the eleventh century it was the stronghold of the Ganga kings, who were Jains, and bore the title 'Lord of Nandagiri.' After the Chola conquest at the beginning of the eleventh century the name was changed to Nandigiri, the 'hill of Nandi,' the bull of Siva. The hill was probably first fortified by the Chik-Ballāpur chiefs, but the existing extensive works were erected by Haidar Alī and Tipū Sultān, subsequent to its seizure by the Marāthās in 1770. A precipitous cliff at the south-west angle is pointed out as Tipū's Drop, being the place over which prisoners are said to have been hurled by the orders of that ruler. The capture of Nandidroog by the British under Lord Cornwallis in 1791 was a memorable feat. During the British occupation of Mysore, the salubrity of the spot led to its becoming a hot-season resort for European officials from Bangalore. On the site of an old tower or fort at the highest point was erected a large house, which was long the favourite retreat of Sir Mark Cubbon.

Rahmān Garh.—Conspicuous hill-fort, 4,227 feet high, in the middle of Kolār District, Mysore, situated in 13° 21′ N. and 78° 1′ E. A large boulder on the western side is covered

with belts of a brown colour, and from a cr
liquid resembling blood is said to issue at th
hot season, which kites and crows eagerly d
surrendered to the British in 1791.

Sidlaghatta Town.—Head-quarters of
same name in Kolār District, Mysore, situa
and 77° 52′ E., 30 miles north-west of Kol
tion (1901), 7,638. It was founded about
chief, in whose family it remained for eighty-
Marāthās then took and held it for forty-fi
was captured by the Mughals. The Marāthās
sion, and sold it to the chief of CHIK-BALL
5 miles round the town occurs a kind of late
which differs from the ordinary formation
growth of large trees. Reduced to clay it
plastering for walls, and makes roofs water
cipality dates from 1870. The receipts and e
the ten years ending 1901 averaged Rs. 3,75
In 1903–4 they were Rs. 5,000.

Urigam (the Ooregum of the gold-mi
the Bowringpet *tāluk* of Kolār District, M
12° 58′ N. and 78° 17′ E., 7 miles by rail east
Population (1901), 6,387. The village conta
tions of the Hoysala king Rāmanātha, dating
of the thirteenth century, in which the name
yam. It was here, in 1875, that the first sh
gold; and since 1885 the neighbourhood
transformed by the development of the gol
foundation of a new town (now named Rober

Tumkūr District.—District in the centre
Area and boundaries. the State of Mysore, lying between 12° 45′
76° 21′ and 77° 28′ E., with an area of 4,158
is bounded north by the Anantapur District
by Kolār and Bangalore Districts; south by
and west by Chitaldroog, Kadūr, and Hassan

Physical aspects. The east is occupied by a range of hills ru
south, which form the eastern boundary of
system. Entering the District at the north
(3,537 feet) and Nidugal (3,772 feet), it
Midagesidurga (3,376 feet), and includes the
of Maddigiridurga (3,935 feet), Channarāyad
Devarāyadurga (3,940 feet), Nijagal (3,569
(3,713 feet), and Huliyūrdurga (3,086 feet).
tinues through the west of Bangalore

Sivaganga and Sāvandurga peaks. The streams from these hills are small, the principal being the Jayamangali, which rises in Devarāyadurga and runs north-east to the Penner, and the Shimsha, which rises to the south of the same hill and runs south to the Cauvery. In the west the Chitaldroog belt is continued in the low Hāgalvādi hills as far as Kibbanhalli, forming part of the Chiknāyakanhalli auriferous band. A line east and west from Koratagere to Tiptūr roughly corresponds with the watershed separating the Kistna basin to the north from that of the Cauvery to the south. The open parts of the District are from 2,500 to 2,700 feet above the sea, but Sira is much lower. The country around Huliyūrdurga is wooded and hilly; otherwise the southern *tāluks* consist of undulating plains, with clumps of well-grown trees, where stone is scarce except on occasional hillocks or ridges. Coco-nut and other palms are confined to the vicinity of tanks. Farther north large plantations of coco-nuts occupy even the 'dry' lands, especially in the Gubbi, Tiptūr, and Chiknāyakanhalli *tāluks*. East from Tumkūr the park-like appearance of that *tāluk* changes, north of Devarāyadurga, to the scenery of a hill country intersected by cultivated valleys; the hills and their skirts are for the most part covered with shrubs, interspersed with trees which remain verdant through the greater part of the year. To the north-east extends a very fertile tract, irrigated from perennial springs called *talpargis*, reached at a depth of only a few feet below the surface. Where the soil is not sandy, the springs may be tapped at short distances from each other.

Geology.

The majority of the rocks are similar in formation to those of Bangalore District. But near Sira westwards stratified hills make their appearance, running in straight lines in various directions. They are quite bare of trees, but in the rainy season have a green appearance from the long hill-grass (*Anthisteria barbata*) which is almost the only vegetation that grows on them. These hills are mostly covered at the top with a kind of magnetic ironstone, that withstands the decomposing powers of the air and water much longer than the lower parts of the hills, which seem to be composed of ferruginous slate clay. In the south-west, near Turuvekere, is a celebrated quarry of black stone in Karekal-gudda, a ridge about half a mile long, 100 yards wide, and 20 to 50 feet high. The stone is an amorphous hornblende, containing minute but distinct rhomboidal lamellar concretions of basaltine. In the hills east of Chiknāyakanhalli is found a hard whetstone or novaculite,

used by natives for polishing diamonds and grinding drugs. The Chiknāyakanhalli schistose band runs south-south-west from Chitaldroog District as far as Turuvekere, with an average width of about 18 miles. There it suddenly pinches, being continued in a narrow band only 2 or 3 miles wide, to the Karigatta hill near Seringapatam. This narrow part consists largely of hornblendic, chloritic, and talcose schists, having less ferruginous quartz schists than in the northern portion, while limestones and conglomerates are absent.

Botany. The flora of this District is practically the same as in Bangalore and Kolār Districts, though generally not so luxuriant.

Meteorology. The climate is reputed to be equable, pleasant, and healthy, agreeing alike with natives and Europeans. In the south and south-west it greatly resembles that of Bangalore; the high elevation, the red soil, and the greenness of the surface among the hills contributing to moderate the temperature. From Sīra northwards the lower level of the country and the prevalence of black soil raise the temperature more nearly to that of the adjoining Bellary country. The east side of every range of hills is said to be perceptibly warmer than the west. The average range of the thermometer at Tumkūr throughout the year at noon is from 74° to 83°. The annual rainfall at the same place averages 39 inches.

History. From an early period the country was in possession of the Gangas. The Pallava Nolambas had a capital at Penjeru or Henjeru (now Hemāvati on the northern border of the Sīra *tāluk*), and Nidugal was their stronghold. Under the Rāshtrakūtas the Kuningil (Kunigal) country was a province. The Hoysalas succeeded the Gangas, and the Henjeru and Nidugal chiefs, who claimed to be of Chola descent, were subdued by them. Partly under them and partly under the Chālukyas there was a small State at Huliyār. Another important district, called Anebiddasari or Anebiddajari, was situated in the country around Tumkūr. Under Vijayanagar this district was maintained, with its head-quarters on Devarāyadurga. Of the modern estates tributary to Vijayanagar, that of Nidugal in the north was founded by chiefs of the Harati family of Chitaldroog District; that of Holavanhalli or Korampur in the east by a chief of the Avati family. There were also the Maddagiri estate in the north, the Hāgalvādi estate in the west, and south of that Hebbūr, which was absorbed by Māgadi. After the fall of Vijayanagar the north was overrun by the Bijāpur power, under which the province of Carnatic Bijāpur, of which Sīra was an important part, was formed in 1638, and placed under

the government of Shāhji, the father of Sivajī. In 1687 the Mughals followed, and made Sīra the capital of the Carnatic territories, which remained in their possession for seventy years. Sīra was then taken in 1757 by the Marāthās, but restored two years after on the conclusion of peace. Meanwhile the Rājās of Mysore had been conquering all the parts not claimed by the Bijāpur government at Sīra. Dodda Deva Rājā died at Chiknāyakanhalli in 1672, and about 1696 Chikka Deva Rājā seized Jadakanadurga, changing its name to Devarāyadurga. In 1761 the Nizām's brother, Basālat Jang, conferred upon Haidar Alī the title of Nawāb of Sīra, and the conquest of the remainder of the District soon followed. In 1766 Sīra again fell into the hands of the Marāthās by the defection of Haidar's brother-in-law, but was retaken in 1774 by Tipū, who afterwards transported 12,000 families to Seringapatam, to people the new suburb of Shahr Ganjam. The Marāthās once again occupied it for a short time in 1791 on their march to join the British army under Lord Cornwallis.

The principal architectural remains are the Muhammadan buildings at Sīra. Of those now standing, the tomb of Malik Rihān (1651) and the Jāma Masjid (1696) are the chief. The inscriptions of the District have been translated and published. Archaeology.

The population at each Census in the last thirty years was: (1871) 689,026, (1881) 452,631, (1891) 580,786, and (1901) 679,162. The decrease in 1881 was due to the famine of 1876-8. By religion, in 1901, there were 633,847 Hindus, 31,765 Musalmāns, 10,388 Animists, 2,207 Jains, 949 Christians, and 6 'others.' The density of population was 163 persons per square mile, that of the State being 185. The number of towns is 18, and of villages 2,753. The largest town is Tumkūr, with a population of 11,888. The people.

The table on the following page gives the principal statistics of population in 1901.

Wokkaligas or cultivators number 174,000; then come Lingāyats, 78,000; followed by the outcaste Mādigas, 60,000, and Holeyas, 37,000. Of Bedas there are 50,000; of Gollas or cowkeepers, 43,000; and of Kurubas or shepherds, 42,000. Brāhmans number 19,000. Of Musalmāns nearly two-thirds are Shaikhs, who number close upon 20,000. The nomad tribes are represented chiefly by 4,000 Lambānis and 3,000 wild Kurubas. About 69 per cent. of the total are engaged in agriculture and pasture; 14 per cent. in the preparation and supply of material substances; 7 per cent. as unskilled labourers not agricultural; and 4 per cent. in the State service. Castes and occupations.

Districts is attracted; as well as that of the west and south of Mysore. At Gubbi areca-nuts, pepper, and cardamoms are imported from Nagar, and transmitted to Vellore and Wālājāpet; whence nutmegs, mace, and European piece-goods are obtained in exchange and exported to Nagar. Sugar, sugar-candy, and silk, the produce of Bangalore, together with coco-nuts raised on the spot, are sent to Dhārwār; whence cotton and thread are received in return, part of which goes to Nagar. The coco-nuts and food-grains of Chiknāyakanhalli and Honnavalli are sent to Bangalore, in exchange for jaggery, sugar, and sugar-candy. From Honnavalli, Turuvekere, and other marts, coco-nuts, iron, steel, tobacco, and silk are exported to Dhārwār and the Southern Marāthā country; and cotton, thread, *kusumba*, and Persian dates are received in exchange, much of the imports going to Bangalore by way of Sīra and Tumkūr. At Bargūr in Sīra and Hampasandra in Maddagiri a trade is carried on between Bangalore and Bellary, sugar, sugar-candy, and European piece-goods from the former being exchanged for cotton from the latter. The most valuable exports are food-grains, coco-nuts, areca-nuts, oilseeds, and oils. The most valuable imports are silk and cotton, food-grains, sugar, and jaggery.

Means of communication. The Southern Mahratta Railway from Bangalore to Poona runs east and west for 61 miles through the District. There are 159 miles of Provincial roads, and 473 miles of District fund roads.

Famine. Since the general famine ending in 1878, the failure of rains has caused apprehension at various times, as in the adjacent Districts, but no serious famine has been felt. In 1896–7 a remission was granted of half the assessment on waste 'wet' lands owing to the failure of rain. The District was somewhat affected in 1905.

Divisions. The District is divided into eight *tāluks*: Chiknāyakanhalli, Gubbi, Kunigal, Maddagiri, Pāvugada, Sīra, Tiptūr, and Tumkūr. The Deputy-Commissioner is the head of the District, and the following subdivisions were formed in 1903 and placed in charge of Assistant Commissioners: Tumkūr and Kunigal; Maddagiri, Pāvugada, and Sīra, with head-quarters at Maddagiri; Gubbi, Chiknāyakanhalli, and Tiptūr, with head-quarters at Tumkūr.

Judicial. The District and Subordinate Judge's courts of Bangalore have jurisdiction over the District, and there are Munsifs at Tumkūr and Maddagiri. Criminal cases are not, as a rule, of a serious nature.

The land revenue and total revenue are shown below, in thousands of rupees :— Land revenue.

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . .	7,77	10,99	12,89	18,08
Total revenue . .	9,17	15,06	19,37	19 68

The revenue survey and settlement were introduced into Sīra, Tumkūr, and Pāvugada between 1870 and 1872, and into the remaining *tāluks* between 1877 and 1882. The incidence of land revenue per acre of cultivated area in 1903-4 was Rs. 1-6-2. The average assessment per acre on 'dry' land is R. 0-9-1 (maximum scale Rs. 2-2-0, minimum scale R. 0-1-6); on 'wet' land, Rs. 3-11-11 (maximum scale Rs. 10, minimum scale R. 0-6-0); and on garden land, Rs. 4-13-3 (maximum scale Rs. 16, minimum scale Rs. 2).

In 1903-4 there were ten municipalities—Tumkūr, Maddagiri, Koratagere, Chiknāyakanhalli, Sīra, Gubbi, Tiptūr, Turuvekere, Pāvugada, and Kunigal—with a total income of Rs. 35,500, and an expenditure of Rs. 40,500. There were also eight Unions—Bellāvi, Kyātsandra, Holavanhalli, Hulliyār, Kadaba, Nonavinkere, Honnavalli, and Huliyūrdurga—with an income and expenditure of Rs. 8,000 and Rs. 18,000. Outside the areas administered by these, local affairs are managed by the District and *tāluk* boards, which had in 1903-4 an income of Rs. 72,000, chiefly derived from a share of the Local fund cess, and which spent Rs. 71,000, including Rs. 61,000 on roads and buildings. Local boards.

The strength of the police force in 1903-4 was one superior officer, 91 subordinate officers, and 558 constables, of whom 2 officers and 29 constables formed the special reserve. There are 11 lock-ups, containing a daily average of twelve prisoners in 1904. Police and jails.

The percentage of literate persons in the District in 1901 was 4·9 (9·1 males, and 0·6 females). The number of schools increased from 511 with 12,038 pupils in 1890-1 to 638 with 18,098 pupils in 1900-1. In 1903-4 there were 606 schools (313 public and 293 private) with 16,617 pupils, of whom 2,846 were girls. Education.

The civil hospital and twelve dispensaries treated 91,735 patients in 1904, of whom 307 were in-patients, the number of beds available being 17 for men and 19 for women. The total expenditure was Rs. 24,000. Medical.

Vaccination. There were 9,266 persons vaccinated in 1904, or 14 per 1,000 of the population.

Tumkūr Tāluk.—Eastern *tāluk* of Tumkūr District, Mysore, lying between 13° 7′ and 13° 32′ N. and 76° 58′ and 77° 21′ E., with an area of 455 square miles. The population in 1901 was 107,513, compared with 90,702 in 1891. The *tāluk* contains three towns, TUMKŪR (population, 11,888), the head-quarters, Kyātsandra (2,067), and BELLĀVI (1,669); and 477 villages. The land revenue demand in 1903–4 was Rs. 1,95,000. The east is occupied by the Devarāyadurga hills, surrounded by forest. The Jayamangali rises there, but has a short and rocky course. South of the hills are fine tanks, the streams forming which run west to the Shimsha. Round Tumkūr the country is very fertile and highly cultivated; to the north it is less fruitful. Areca-nut and coco-nut gardens abound.

Gubbi Tāluk.—Central *tāluk* of Tumkūr District, Mysore, lying between 13° 2′ and 13° 36′ N. and 76° 42′ and 77° 0′ E., with an area of 552 square miles. The population in 1901 was 87,468, compared with 73,570 in 1891. The *tāluk* contains two towns, GUBBI (population, 5,593), the head-quarters, and Kadaba (1,385); and 421 villages. The land revenue demand in 1903–4 was Rs. 1,92,000. The Shimsha flows south through the middle of the *tāluk*, forming the large Kadaba tank. In the north-west are the bare Hāgalvādi hills, part of the Chiknāyakanhalli auriferous band. The rest of the *tāluk* is generally open and well watered. The soil is mostly a red mould, shallow and gravelly.

Kunigal.—South-eastern *tāluk* of Tumkūr District, Mysore, lying between 12° 45′ and 13° 8′ N. and 76° 50′ and 77° 10′ E., with an area of 382 square miles. The population in 1901 was 77,861, compared with 66,502 in 1891. The *tāluk* contains two towns, Kunigal (population, 1,802), the head-quarters, and Huliyūrdurga (1,746); and 315 villages. The land revenue demand in 1903–4 was Rs. 1,32,000. The Shimsha runs along the western and part of the southern border, receiving the Nāgani from the large tank at Kunigal. The south-east is occupied by the great hill range running north up to Maddagiri. Round Huliyūrdurga (3,086 feet), and from there to Hutridurga (3,713 feet) and Kunigal, the country is very hilly and jungly, with rocky and barren ground. In the north and west the soil is fertile and well cultivated. The old name, in the ninth century, under the Rāshtrakūtas, was Kuningil.

Tiptūr.—South-western *tāluk* of Tumkūr District, Mysore, containing the Turuvekere sub-*tāluk*, and lying between 13° 0′

and 13° 26′ N. and 76° 21′ and 76° 51′ E., with an area of 508 square miles. The population in 1901 was 90,709, compared with 78,867 in 1891. The *tāluk* contains four towns, Tiptūr (population, 3,560), the head-quarters, Turuvekere (2,333), HONNAVALLI (2,247), and Nonavinkere (1,585); and 391 villages. The land revenue demand in 1903–4 was Rs. 2,00,000. The *tāluk* drains to the Shimsha, running along the eastern border, and is generally undulating. In the extreme north and west are rocky hills, spurs of the Hirekal group. On the south-east lie hills yielding fine black hornblende, which has been much quarried for pillars of temples, &c. The soil is mostly gravelly, but reddish and mixed with sand in the centre and south. Coco-nuts are extensively cultivated, both with and without irrigation. The coco-nuts of Honnavalli are specially noted for their flavour.

Chiknāyakanhalli Tāluk.—Western *tāluk* of Tumkūr District, Mysore, including Huliyār as a sub-*tāluk* till 1902, and lying between 13° 19′ and 13° 44′ N. and 76° 21′ and 76° 45′ E., with an area of 532 square miles. The population in 1901 was 60,071, compared with 50,760 in 1891. An area of 97 square miles was transferred to the District of Chitaldroog in 1902–3. The *tāluk* contains two towns, CHIKNĀYAKANHALLI (population, 6,113), the head-quarters, and HULIYĀR (1,228); and 278 villages. The land revenue demand in 1903–4 was Rs. 1,19,000. From east to north the *tāluk* is crossed by low bare hills of the Chiknāyakanhalli auriferous band. Humidity from fogs which form on the hills often preserves the crops from failure in dry seasons. The drainage is northwards to the Vedāvati or Hagari. In the north-east the large Borankanave tank has been formed by damming a gorge in the hills. Coco-nut and areca-nut plantations abound in the *tāluk*. Gold-mining has been experimentally begun at Bellara in the north.

Sīra Tāluk.—Northern *tāluk* of Tumkūr District, Mysore, lying between 13° 29′ and 14° 6′ N. and 76° 41′ and 77° 3′ E., with an area of 599 square miles. The population in 1901 was 77,604, compared with 68,327 in 1891. The *tāluk* contains one town, SĪRA (population, 4,059), the head-quarters, and 247 villages. The land revenue demand in 1903–4 was Rs. 1,45,000. The *tāluk* is lower than the rest of the District. From east to west it is traversed by a stream which flows into the Vedāvati or Hagari, and whose course is marked by coco-nut gardens. The north-east is fertile and well watered, while in other parts the soil is rocky and hard. Along the west is a good deal of jungle.

Maddagiri. — North-eastern *tāluk* of Tumkūr District, Mysore, including the Koratagere sub-*tāluk*, and lying between 13° 27′ and 13° 55′ N. and 77° 1′ and 77° 28′ E., with an area of 606 square miles. The population in 1901 was 116,695, compared with 97,973 in 1891. The *tāluk* contains three towns, Maddagiri (population, 4,060), the head-quarters, Koratagere (2,811), and HOLAVANHALLI (1,682); and 480 villages. The land revenue demand in 1903–4 was Rs. 2,27,000. The *tāluk* is crossed from north to south by the lofty chain of mountains which include Midagesidurga (3,414 feet), Maddagiridurga (3,935 feet), and Channarāyadurga (3,744 feet). The valleys west of the range and south of Maddagiri are higher than the other parts of the *tāluk*. The open country to the north-east is principally watered by the Jayamangali, and a small portion by the Kumadvati, both affluents of the Penner, which flows near the boundary. The large Māvattūr tank has been formed in the south-east, in a very fertile tract, and is fed by *talpargis* or spring-heads near the surface.

Pāvugada.—North-eastern *tāluk* of Tumkūr District, Mysore, detached from the rest, and almost entirely surrounded by Madras territory. It lies between 13° 53′ and 14° 21′ N. and 77° 0′ and 77° 31′ E., with an area of 524 square miles. The population in 1901 was 61,241, compared with 53,377 in 1891. The *tāluk* contains one town, Pāvugada (population, 2,840), the head-quarters, and 144 villages. The land revenue demand in 1903–4 was Rs. 99,000. The Penner runs across the east. The west and north of the *tāluk* abound in rocky hills, many crowned with fortifications, among which the needle-peak of Nidugal (3,772 feet) is conspicuous from all the surrounding country. The separate tract east of the Penner is also bounded by hills. The soil is sandy, and abounds in *talpargis* or spring-heads. In some parts wells have to be cut through a soft porous rock. Some tobacco and cotton are grown. Iron and rice are exported.

Bellāvi.—Town in the Tumkūr *tāluk* of Tumkūr District, Mysore, situated in 13° 25′ N. and 77° 1′ E., 9 miles north-west of Tumkūr town. Population (1901), 1,669. A great weekly fair is held here, on which all the surrounding country depends, and which is an important mart for exports. The streets are wide, with uniform shops on either side. The municipality formed in 1870 was converted into a Union in 1904. The receipts and expenditure during the ten years ending 1901 averaged Rs. 960 and Rs. 700. In 1903–4 they were Rs. 1,000 and Rs. 2,700.

Chiknāyakanhalli Town.—Head-quarters of the *tāluk* of the same name in Tumkūr District, Mysore, situated in 13° 25′ N. and 76° 37′ E., 12 miles north of Bānasandra railway station. Population (1901), 6,113. It is named after Chikka Naik, one of the Hāgalvādi chiefs at the end of the sixteenth century. The town was held alternately by the Muhammadans and the Marāthās till taken in 1671 by the Mysore Rājā, and it then formed the north frontier town. Dodda Deva Rājā of Mysore died here in 1672. The place was plundered and the fort destroyed by the Marāthās on their way to join Lord Cornwallis before Seringapatam in 1791. It is a prosperous town, surrounded by coco-nut and areca-nut gardens. Their produce, with the white and coloured cotton cloths made in the place, are largely sold at the weekly fair. There are seven endowed temples. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 2,700 and Rs. 2,500. In 1903–4 they were Rs. 4,000 and Rs. 3,800.

Devarāyadurga.—Fortified hill, 3,940 feet high, and a hot-season resort, in Tumkūr District, Mysore, situated in 13° 23′ N. and 77° 12′ E. It is surrounded with hills and forest, consists of three terraces, and is well supplied with springs. Under the Hoysalas there was on this hill a town called Anebiddasari or Anebiddajari, which gave its name to the district below. The hill was in the possession of a local chief, and was called Jadakanadurga when captured, about 1696, by Chikka Deva Rājā of Mysore, who erected the present fortifications, and gave his own name to the hill, since shortened into Devarāyadurga. The temple of Durga Narasimha, on a terrace of the highest part, was built by Kanthīrava Rājā of Mysore.

Gubbi Town.—Head-quarters of the *tāluk* of the same name in Tumkūr District, Mysore, situated in 13° 18′ N. and 76° 57′ E., on the Southern Mahratta Railway, 13 miles west of Tumkūr town. Population (1901), 5,593. Gubbi is said to have been founded about the fifteenth century by the hereditary chief of the Nonaba Wokkaligas. It is an important trading place, inhabited by Komatis and Lingāyat Banajigas. It is the *entrepôt* of the areca-nut trade between the Nagar Malnād and Wālājāpet in North Arcot District. *Kopra*, or dried coco-nut, and areca-nuts produced in the surrounding country are largely sold at the fair, together with cotton cloths, blankets, grain, and a variety of other articles, even from distant places, for which a ready market is found. The Wesleyan Mission has a station here. The municipality dates from 1871. The receipts and

expenditure during the ten years ending 1901 averaged Rs. 2,300. In 1903–4 they were Rs. 3,300 and Rs. 4,100.

Holavanhalli.—Village in the Maddagiri *tāluk* of Tumkūr District, Mysore, situated in 13° 32′ N. and 77° 18′ E., on the west bank of the Jayamangali, 18 miles north-east of Tumkūr town. Population (1901), 1,682. It was originally called Korampur; but Baire Gauda, one of the Avati family, built the fort and named it after the chief in possession. The estate became tributary to Vijayanagar, but was before long taken by the chief of Dod-Ballāpur, and two years later by the Sūbahdār of Sīra, who restored it to the family. They fortified Koratagere and extended their territory, continuing to rule till subdued by Haidar Alī. The municipality, formed in 1894, was converted into a Union in 1904. The receipts and expenditure during the seven years ending 1901 averaged Rs. 4,500 and Rs. 4,250. In 1903–4 they were Rs. 900 and Rs. 1,100.

Honnavalli.—Town in the Tiptūr *tāluk* of Tumkūr District, Mysore, situated in 13° 20′ N. and 76° 23′ E., 5 miles north of Konehalli railway station. It is named after the tutelary goddess, Honnu-amma, who in a vision directed Somesvara, a chief of Hāranhalli (Hassan District), to found the town. It is situated amid coco-nut plantations, which produce a rare kind called Gangā-pāni, the young nut of which yields delicious milk. The inhabitants include many Brāhmans. The municipality, formed in 1900, became a Union in 1904. The receipts and expenditure for the first year were Rs. 1,200 and Rs. 330. In 1903–4 they were Rs. 1,300 and Rs. 3,400.

Huliyār.—Town in the Chiknāyakanhalli *tāluk* of Tumkūr District, Mysore, situated in 13° 35′ N. and 76° 32′ E., 14 miles from Chiknāyakanhalli. Population (1901), 1,228. Chālukya inscriptions and other remains indicate that the place may have been of some importance in early times. In the sixteenth century it was held by the chiefs of Hāgalvādi. It was next included in the Mughal province of Sīra, till subdued by Haidar Alī. The municipality dates from 1880. The receipts and expenditure during the ten years ending 1901 averaged Rs. 700. In 1903–4 they were Rs. 900 and Rs. 1,200.

Maddagiridurga.—Bold fortified hill, 3,935 feet high, in the north-east of Tumkūr District, Mysore, situated in 13° 39′ N. and 77° 13′ E. The only access is on the northern face, which slopes upwards at a steep angle, presenting large sheets of bare rock that scarcely allow of foothold unless perfectly

dry. In time of war the garrison, it is said, used to pour oil down these rocky inclines to prevent the assailing force from mounting the hill. The original fort was built by a local chief, from whose descendants it was taken by Mysore about 1678. The fortifications were greatly extended by Haidar Alī; and here, in 1763, was imprisoned the queen of Bednūr, with her paramour, and also the pretender to her throne, until released by the Marāthās in 1767 on their capture of the place. It was recovered by Tipū Sultān in 1774. There are many springs and ponds on the hill, with large granaries and store-houses, formed out of caverns or excavated in the rock.

Midagesidurga.—Fortified hill, 3,376 feet high, in the north-east of Tumkūr District, Mysore, situated in 13° 50′ N. and 77° 12′ E. It is said to be named after a princess who was burned here with the corpse of her husband. Rānīs of the same family held it till it was taken about 1670 by the Maddagiri chiefs, in whose hands it remained till captured by Haidar Alī in 1761. The Marāthās took it in 1767, but it was recovered by Tipū Sultān in 1774.

Nidugal.—Pointed hill, 3,772 feet high, in the north of Tumkūr District, Mysore, situated in 14° 9′ N. and 77° 5′ E. The lower part is surrounded with six lines of fortifications. In the ninth and tenth centuries it was held by the Nolamba chiefs of the Pallava family, whose capital was at Henjeru, now called Hemāvati. It then passed to the line of Chola chiefs under the Chālukyas, and the Hoysalas took it early in the thirteenth century. Under Vijayanagar rule, the Harati chiefs established themselves at Nidugal and held it until it was captured in 1761 by Haidar Alī, who made them tributary. Tipū Sultān later seized their possessions, and put an end to the line.

Sīra Town.—Head-quarters of the *tāluk* of the same name in Tumkūr District, Mysore, situated in 13° 44′ N. and 76° 54′ E., 33 miles by road from Tumkūr town. Population (1901), 4,059. It was founded by the chief of Ratnagiri, but before being completed was captured by the Sultān of Bijāpur in 1638, and formed part of the *jāgīr* of Shāhji, father of Sivajī. In 1687 it came under the Mughals, and was made the capital of their Carnatic province south of the Tungabhadra. In 1757 it was taken by the Marāthās, but in 1761 was captured by Haidar Alī. In 1766 his brother-in-law gave it up again to the Marāthās, from whom it was recaptured by Tipū Sultān in 1774. It attained its greatest prosperity under Dilāwar Khān, the Mughal governor from 1724 to 1756, when it is

said to have contained 50,000 houses. The palace erected by him formed the model for Haidar's and Tipū's palaces at Bangalore and Seringapatam. The fine garden called the Khān Bāgh was kept up by Haidar, and may have suggested the Lāl Bāgh at Bangalore. Tipū forcibly deported 12,000 families from Sīra to populate his new town, Shahr Ganjam, on the island of Seringapatam. The fort (from which the Bangalore fort was evidently copied) is well built of stone, and still remains. This, with the Jāma Masjid of hewn stone (1696), and the tomb of Malik Rihān (1651), are the principal survivals of its former greatness. There is a large tank for irrigation to the north, and the soil around is favourable for the growth of coco-nuts, the dried kernels of which are the staple article of export. The population are largely Kurubas, who make blankets from wool imported from Dāvangere and other parts, and export them to Wālājāpet in the east and to Coorg and Mangalore in the west. Chintzes and sealing-wax used to be made, but have been superseded by articles of English manufacture. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 2,300. In 1903-4 they were Rs. 3,700 and Rs. 3,000.

Tumkūr Town.—Head-quarters of the District and *tāluk* of Tumkūr, Mysore, situated in 13° 21′ N. and 77° 6′ E., on the Southern Mahratta Railway, 43 miles north-west of Bangalore. Population (1901), 11,888. It stands on elevated ground at the south-west base of the Devarāyadurga hills, near the waste weir of a large tank, and is surrounded by gardens of plantains and palms, besides fine groves. From the twelfth century it was included in the Anebiddajari or Anebiddasari District. The present town is said to have been founded by Kānta Arasu, one of the Mysore family. The walls of the fort have been levelled. Tumkūr is a principal station of the Wesleyan Mission. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 14,500 and Rs. 11,000. In 1903-4 they were Rs. 10,000 and Rs. 15,000.

Area and boundaries.

Mysore District.—District in the south of the State of Mysore, lying between 11° 36′ and 13° 3′ N. and 75° 55′ and 77° 20′ E., with an area of 5,496 square miles. It is bounded on the north by Hassan and Tumkūr Districts; on the east by Bangalore and the Coimbatore District of Madras; on the south by the Nīlgiri and Malabar Districts of Madras; and on the west by Coorg.

Physical aspects.

The river Cauvery, besides forming the boundary for some

distance both on the west and east, traverses the District from north-west to east, receiving as tributaries the Hemāvati, Lokapāvani, and Shimsha on the north, and the Lakshman-tīrtha, Kabbani, and Honnu-hole or Suvarnāvati on the south. Lofty mountain ranges covered with vast forests, the home of the elephant, shut in the western, southern, and some parts of the eastern frontier. The only break in this mighty barrier is in the south-east, where the Cauvery takes its course towards the lowlands and hurls itself down the Cauvery Falls, called Gagana Chukki and Bhar Chukki, at the island of Sivasamudram. The principal range of hills within the District is the BILIGIRI-RANGAN in the south-east, rising to 5,091 feet above the level of the sea. Next to these, the isolated hills of Gopālswāmi in the south (4,770 feet), and of Bettadpur in the north-west (4,389 feet), are the most prominent heights, with the Chāmundi hill (3,489 feet) to the south-east of Mysore city. The French Rocks (2,882 feet), north of Seringapatam, are conspicuous points of a line culminating in the sacred peak of Melukote (3,579 feet). Short ranges of low hills appear along the south, especially in the south-west. On the east are encountered the hills which separate the valleys of the Shimsha and Arkāvati, among which KABBĀLDURGA (3,507 feet) has gained an unenviable notoriety for unhealthiness.

Mysore District may be described as an undulating table-land, fertile and well watered by perennial rivers, whose waters, dammed by noble and ancient anicuts, enrich their banks by means of canals. Here and there granite rocks rise from the plain, which is otherwise unbroken and well wooded. The extreme south forms a *tarai* of dense and valuable but unhealthy forest, occupying the depression which runs along the foot of the Nīlgiri mountains. The lowest part of this is the remarkable long, steep, trench-like ravine, sometimes called the Mysore Ditch, which forms the boundary on this side, and in which flows the Moyār. The irrigated fields, supplied by the numerous channels drawn from the Cauvery and its tributaries, cover many parts with rich verdure. Within this District alone there are twenty-seven dams, the channels drawn from which have a total length of 807 miles, yielding a revenue of $5\frac{1}{3}$ lakhs.

Geology.

The geological formation is principally of granite, gneiss, quartz, and hornblende. In many places these strata are overlaid with laterite. Stone for masonry, principally common granite, is abundant throughout the District. Black hornblende of inferior quality and potstone are also found.

Quartz is plentiful, and is chiefly used for road-metalling. Dikes of felsites and porphyries occur abundantly in the neighbourhood of Seringapatam, and a few elsewhere. They vary from fine-grained hornstones to porphyries containing numerous phenocrysts of white to pink felspar, in a matrix which may be pale green, pink, red, brown, or almost black. The majority of the porphyries form handsome building stones, and some have been made use of in the new palace at Mysore. Corundum occurs in the Hunsūr *tāluk*. In Singaramāranhalli the corundum beds were found to be associated with an intrusion of olivine-bearing rocks, similar to those of the Chalk Hills near Salem, and large masses of a rock composed of a highly ferriferous enstatite, with magnetite and iron-alumina spinel or hercynite.

Botany. The trees in the extensive forest tract along the southern and western boundary are not only rich in species, but attain a large size. Of teak (*Tectona grandis*) there are several large plantations. Other trees include *Shorea Talura*, *Pterocarpus Marsupium*, *Terminalia tomentosa*, *Lagerstroemia lanceolata*, and *Anogeissus latifolia*, which are conspicuous and very abundant in the Muddamullai forest. In February most of these trees are bare of leaf, and represent the deciduous belt. In open glades skirting the forests and descending the Bhandipur *ghāt* are plants of a varied description. *Bambusa arundinacea* occurs in beautiful clumps at frequent intervals. There are also *Helicteres Isora*, *Hibiscus Abelmoschus*, and many others. *Capparis grandiflora* is most attractive in the Bhandipur forest, and there is also a species without thorns. Clusters of parasites, such as *Viscum orientale*, hang from many trees. On the Karabi-kanave range farther north the grasses *Andropogon pertusus* and *Anthistiria ciliata* attain an abnormal size, and are often difficult to penetrate. Ferns, mosses, and lichens are abundant in the rainy season. There are also a few orchids. The heaviest forest jungle is about Kākankote in the south-west. The BILIGIRI-RANGAN range in the south-east possesses an interesting flora with special features. The growth includes sandal-wood, satin-wood (*Chloroxylon Swietenia*), *Polyalthia cerasoides*, and others. The *babūl* (*Acacia arabica*) attracts attention by the roadside and in cultivated fields. Hedgerows of *Euphorbia Tirucalli*, *Jatropha Curcas*, and *Vitex Negundo* are not uncommon. In the poorest scrub tracts *Phoenix farinifera* is often gregarious. The growth in the parks at Mysore city is not so luxuriant as at Bangalore, where the soil is richer; but in the matter of species it is much the same.

The flora of Chāmundi, which is a stony hill, is limited in species and poor in growth. Clinging to the rivers and canals are found such plants as *Crinum zeylanica*, *Salix tetrasperma*, and *Pandanus odoratissimus*.

The mean temperature and diurnal range at Mysore city in January are 73° and 25°; in May, 81° and 23°; in July, 75° and 16°; in November, 73° and 18°. The climate is generally healthy, but intermittent fevers prevail during the cold months. The annual rainful averages 33 inches. The wettest month is October, with a fall of 8 inches; then May, with 6; and next September, with 5 inches. Climate and rainfall.

The earliest traditional knowledge we have relating to this District goes back to the time of the Maurya emperor, Chandra Gupta, in the fourth century B.C. At that time a State named Punnāta occupied the south-west. After the death of Bhadrabāhu at Sravana Belgola, the Jain emigrants whom he had led from Ujjain in the north, Chandra Gupta being his chief disciple, passed on to this tract. It is mentioned by Ptolemy, and its capital Kitthipura has been identified with Kittūr on the Kabbani, in the Heggadadevankote *tāluk*. The next mention concerns Asoka, who is said to have sent Buddhist missionaries in 245 B.C. to Vanavāsi on the north-west of the State, and to Mahisa-mandala, which undoubtedly means the Mysore country. After the rise of the Ganga power, their capital was established in the third century A.D. at Talakād on the Cauvery. They are said to have had an earlier capital, at Skandapura, supposed to be Gazalhatti, on the Moyār, near its junction with the Bhavāni; but this is doubtful. In the fifth century the Ganga king married the Punnāta king's daughter, and Punnāta was soon after absorbed into the Ganga kingdom. In the eighth century the Rāshtrakūtas overcame and imprisoned the Ganga king, appointing their own viceroys over his territories. But he was eventually restored, and intermarriages took place between the two families. In the tenth century the Ganga king assisted the Rāshtrakūtas in their war with the Cholas. In 1004 the Cholas invaded Mysore under Rājendra Chola, and, capturing Talakād, brought the Ganga power to an end. They subdued all the country up to the Cauvery, from Coorg in the west to Seringapatam in the east, and gave to this District the name Mudikondachola-mandalam. History.

Meanwhile the Hoysalas had risen to power in the Western Ghāts, and made Dorasamudra (Halebīd in Hassan District) their capital. About 1116 the Hoysala king, Vishnuvardhana,

took Talakād and expelled the Cholas from all parts
He had been converted from the Jain faith by the
reformer Rāmānuja, and bestowed upon him the As
or 'eight townships,' with all the lands north and sc
Cauvery near Seringapatam. The Hoysalas remained
nant power till the fourteenth century. The Muh
from the north then captured and destroyed Do
and the king retired at first to Tondanūr (Tonnū
Seringapatam). But in 1336 was established the V
empire, which speedily became paramount throu
South. One of the Sāluva family, from whom the
second dynasty arose, is said to have built the gr
at Seringapatam. But Narasinga, the founder of the
or third dynasty, seized Seringapatam about 1495 b
the Cauvery and crossing over it when in full flood.
Ganga Rājā, the Ummattūr chief, rebelled at Siva
and was put down by Krishna Rāya, in 1511. Eve
Mysore country was administered for Vijayanagar by
called the Srī Ranga Rāyal, the seat of whose gover
at Seringapatam. Among the feudal estates under
in this part were Mysore, Kalale, and Ummattūr in
and the Changālva kingdom in the west. After the
of Vijayanagar by the Muhammadans in 1565, th
authority declined, and the feudatories began to as
pendence. At length in 1610 he retired, broken
health, to die at Talakād, and Rājā Wodeyar of My
possession of Seringapatam. This now became t
capital, and the lesser estates to the south were ab
the Mysore kingdom. Seringapatam was several tim
by various enemies, but without success. From 17
the Mysore throne was held by the Muhammada
Haidar Alī and Tipū Sultān. During this period s
took place with the British, in the course of which
died and finally Tipū Sultān was killed. The My
was then restored to power by the British, and M
became the capital in place of Seringapatam. Ow
tinuous misrule, resulting in a rebellion of the
Mysore Rājā was deposed in 1831 and the coun
istered by a British Commission. This continue
when Mysore was again entrusted, under suitable
to the ancient Hindu dynasty.

Archaeology. Of architectural monuments the principal one i
nāthpur temple, the best existing complete exam
Chālukyan style. It was built in 1269, under th

It is a triple temple, and Fergusson considered the sculpture to be more perfect than at Belūr and Halebīd. Other notable examples of the same style are the temples at Basarālu, built in 1235, and one at Kikkeri, built in 1171. The tall pillars of the temple in Agrahāra Bāchahalli are of interest. They are of the thirteenth century, and on the capital of each stands the figure of an elephant, with Garuda as the *mahaut*, and three or four people riding on it. As good examples of the Dravidian style may be mentioned the temples at Seringapatam, Nanjangūd, and on the Chāmundi hill. Of Muhammadan buildings the most noteworthy are the Gumbaz or mausoleum of Haidar and Tipū at Ganjam, and the Daryā Daulat summer palace at Seringapatam. Of the latter, Mr. Rees, who has travelled much in Persia and India, says:—

'The lavish decorations, which cover every inch of wall from first to last, from top to bottom, recall the palaces of Ispahān, and resemble nothing that I know in India.'

Attention may also be directed to the bridges of purely Hindu style and construction at Seringapatam and Sivasamudram. The numerous inscriptions of the District have been translated and published.

The people.

The population at each Census in the last thirty years was: (1871) 1,104,808, (1881) 1,032,658, (1891) 1,181,814, and (1901) 1,295,172. The decrease in 1881 was due to the famine of 1876–8. By religion, in 1901 there were 1,232,958 Hindus, 49,484 Musalmāns, 6,987 Animists, 3,707 Christians, 2,006 Jains, and 30 Pārsīs. The density of population was 235 persons per square mile, that of the State being 185. The number of towns is 27, and of villages 3,212. Mysore, the chief town (population, 68,111), is the only place with more than 20,000 inhabitants.

The table on the next page gives the principal statistics of population in 1901.

Castes and occupations.

The Wokkaligas or cultivators are the strongest caste in numbers, their total being 320,000. Next come the outcaste Holeyas and Mādigas, of whom there are 194,000 and 25,000; the Lingāyats, numbering 173,000; Kurubas or shepherds, 127,000; Besta or fishermen, 10,200. The total of Brāhmans is 43,000. Among Musalmāns the Sharīfs form nearly seven-tenths, being 29,000. The nomad Korama number 2,500; wild Kuruba, 2,300; and Iruliga, 1,600. About 74 per cent. of the total are engaged in agriculture and pasture; 8 per cent. each in unskilled labour not agricultural, and in the preparation and supply of material substances; 2·5 per cent. in the

State service, and 2·4 per cent. in personal services; 1·9 per cent. in commerce, transport, and storage; and 1·8 per cent. in professions.

Tāluk.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Mysore . .	306	1	163	133,840	438	− 0·6	14,858
Hunsūr . .	660	2	412	115,928	176	+ 2·3	3,280
Yedatore . .	236	3	177	82,330	349	+ 10·9	2,915
Krishnarājpet .	425	2	373	102,816	242	+ 12·4	3,141
Nāgamangala .	401	1	366	76,581	191	+ 10·6	2,449
Mandya . .	450	2	300	115,574	257	+ 15·8	3,204
Seringapatam .	274	4	210	88,691	323	+ 4·0	4,580
Malavalli .	391	1	231	101,779	260	+ 18·5	2,531
Tirumakūdal-Narsipur .	225	4	125	87,680	389	+ 9·0	2,627
Nanjangūd .	384	2	206	108,173	281	+ 12·5	3,034
Yelandūr *jāgīr*.	102	1	27	35,271	345	+ 11·1	1,145
Chāmrājnagar .	487	1	190	110,196	226	+ 14·9	3,582
Gundalpet .	535	1	155	74,897	137	+ 19·7	2,199
Heggadadevankote . .	620	2	276	61,416	99	+ 0·3	1,726
District total	5,496	27	3,211	1,295,172	235	+ 9·6	51,271

Christian missions. The Christians in the District number 3,700, of whom 2,200 are in Mysore city. The total includes 3,300 natives. Early in the eighteenth century a Roman Catholic chapel was built at Heggadadevankote, but the priest was beaten to death by the people. A chapel at Seringapatam, which was courageously defended by the Christian troops, escaped the destruction of all Christian churches ordered by Tipū Sultān. After the downfall of the latter in 1799, the well-known Abbé Dubois took charge, and founded the mission at Mysore, where large churches, schools, and convents are in existence. The London and Wesleyan Missions began work at Mysore in 1839, but the former retired in 1850. The Wesleyans have churches, a college, schools for boys and girls, and a printing press, and are building a large hospital for women and children.

General agricultural conditions. Red soil prevails throughout the District, while one of the most valuable tracts of the more fertile black soil in the country runs through the south-east in the Chāmrājnagar *tāluk* and the Yelandūr *jāgīr*.

Chief agricultural statistics and principal crops. The table on the next page gives statistics of cultivation in 1903–4.

The crops, both 'wet' and 'dry,' are classed under two heads, according to the season in which they are grown, *hain*

and *kār*. The season for sowing both 'wet' and 'dry' *hain* crops opens in July, that for sowing *kār* 'wet' crops in September, and for *kār* 'dry' crops in April. It is only near a few rain-fed tanks in the east that both *hain* and *kār* crops are now obtained from the same 'wet' lands in the year. On 'dry' lands it is usual to grow two crops in the year, the second being a minor grain, if the land is fertile enough to bear it. But of grains which form the staple food, such as *rāgī* and *jola*, the land will only produce one crop as a rule, and consequently the ryots are obliged to choose between a *hain* or *kār* crop. In the north the former is preferred, because the growth is there more influenced by the monsoon. But in the south a *kār* crop is found more suitable, because the springs and frequent rain afford a tolerable supply of water all the year round, whereas the south-west monsoon, which falls with greater force on the forest land, would render ploughing in June laborious. *Rāgi* in 1903-4 occupied 873 square miles; gram, 521; other food-grains, 560; rice, 184; oilseeds, 159; garden produce, 27; sugar-cane, 10.

Tāluk.	Area in square miles, shown in the revenue accounts.				
	Total.	Cultivated.	Irrigated.	Forests.	Cultivable waste.
Mysore	260	153	5	1	12
Hunsūr	620	213	15	76	32
Yedatore	200	145	28	1	3
Krishnarājpet	372	182	23	6	13
Nāgamangala	372	157	9	12	10
Mandya	412	225	21	...	11
Seringapatam	246	139	34	11	10
Malavalli	329	175	7	50	1
Tirumakūdal-Narsipur	167	125	21	...	1
Nanjangūd	314	190	18	15	5
Chāmrājnagar	398	161	20	99	3
Gundalpet	544	167	2	177	3
Heggadadevankote	592	118	6	199	13
Total	4,826	2,150	209	647	117

Coffee cultivation has been tried, the most successful being in the Biligiri-rangan region. Much attention has been paid to mulberry cultivation in the east, in connexion with the rearing of silkworms. During the twelve years ending 1904 Rs. 29,000 was advanced as agricultural loans for land improvement, and Rs. 16,500 for field embankments. Improvements in agricultural practice.

The area irrigated from canals is 122 square miles, from tanks and wells 72, and from other sources 15. The length of Irrigation.

channels drawn from rivers is 807 miles, and the number of tanks 1,834, of which 157 are classed as 'major.'

Forests.

The south and west are occupied by continuous heavy forest, described in the paragraph on Botany. The State forests in 1904 covered an area of 521 square miles, 'reserved' lands 81, and plantations 8. Teak, sandal-wood, and bamboos, with other kinds of timber, are the chief sources of forest revenue. The forest receipts in 1903-4 amounted to nearly 5 lakhs.

Mines and quarries.

Gold-mining, experimentally begun at the Amble and Wolagere blocks near Nanjangūd, has been abandoned. Prospecting for gold has also been tried near Bannūr. Iron abounds in the rocky hills throughout the District, but is worked only in the Heggadadevankote and Malavalli *tāluks*. The iron of Malavalli is considered the best in the State. Stones containing magnetic iron are occasionally turned up by the ploughshare near Devanūr in the Nanjangūd *tāluk*. Talc is found in several places, and is used for putting a gloss on baubles employed in ceremonies. It occupies the rents and small veins in decomposing quartz, but its laminae are not large enough to serve for other purposes. Asbestos is found in abundance in the Chāmrājnagar *tāluk*. Nodules of flint called *chakmukki* are found in the east, and were formerly used for gun-flints.

Arts and manufactures.

Cotton cloth, blankets, brass utensils, earthenware, and jaggery (unrefined sugar) from both cane and date, are the principal manufactures. There is also some silk-weaving. The best cloth is made at Mysore and Ganjam. At Hunsūr factories were formerly maintained in connexion with the Commissariat, consisting of a blanket factory, a tannery and leather factory, and a wood-yard where carts and wagons were built. Although these have been abolished, their influence in local manufactures remains. Nearly all the country carts of the District are made here. There are also extensive coffee-works and saw-mills, under European management. The number of looms or small works reported for the District are: Silk, 50; cotton, 4,267; wool, 2,400; other fibres, 862; wood, 200; iron, 360; oil-mills, 857; sugar and jaggery, 360.

Commerce and trade.

A great demand exists for grain required on the west coast and in Coimbatore, and the Nīlgiri market derives a portion of its supplies from this District. There is also considerable trade with Bangalore and Madras. Many of the traders are Musalmāns, and on the Nīlgiri road Lambānis are largely employed in trade. The large merchants, who live chiefly in

Mysore, are for the most part of the Kunchigar caste. They employ agents throughout the District to buy up the grain, in many cases giving half the price in advance before the harvest is reaped. A few men with capital are thus able to some extent to regulate the market. Much of the trade of the country is carried on by means of weekly fairs, which are largely resorted to, and at Chunchankatte in the Yedatore *tāluk* there is an annual fair which lasts for a month. Upon these the rural population are mainly dependent for supplies. The most valuable exports are grain, oilseeds, sugar and jaggery; and the most valuable imports are silk cloths, rice, salt, piece-goods, *ghī*, cotton and cotton thread, and areca-nuts.

Means of communication. The Mysore State Railway from Bangalore to Nanjangūd runs for 61 miles through the District from the north-east to the centre. The length of Provincial roads is 330 miles, and of District fund roads 539 miles.

Famine. The District is virtually secured against famine by the extensive system of irrigation canals drawn from the Cauvery and its tributaries. In 1900 some test works for relief were opened for a short time in the Mandya *tāluk*.

Divisions. The District is divided into fourteen *tāluks*: Chāmrājnagar, Gundalpet, Heggadadevankote, Hunsūr, Krishnarājpet, Malavalli, Mandya, Mysore, Nāgamangala, Nanjangūd, Seringapatam, Tirumakūdal-Narsipur, Yedatore, and the Yelandūr *jāgīr*. It is under a Deputy-Commissioner, and subject to his control the *tāluks* have been formed into the following groups in charge of Assistant Commissioners: Mysore, Seringapatam, Mandya, and Malavalli, with head-quarters at French Rocks; Nāgamangala and Krishnarājpet, with head-quarters at Krishnarājpet; Chāmrājnagar, Nanjangūd, Gundalpet, and Tirumakūdal-Narsipur, with head-quarters at Nanjangūd; Heggadadevankote, Hunsūr, and Yedatore, with head-quarters at Mysore city.

Judicial. There are District and Subordinate Judge's courts at Mysore city, whose jurisdiction extends to Hassan District, besides two Munsifs' courts; in addition, there are Munsifs at Seringapatam and Nanjangūd. Dacoity is not infrequent.

Land revenue. The land revenue and total revenue are shown below, in thousands of rupees:—

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . .	10,03	15,65	19,01	19,20
Total revenue . .	15,00	29,06	33,40	34,75

The revenue survey and settlement were introduced in the

west in 1884, in the north and east between
in the south between 1891 and 1896. The i
revenue per acre of cultivated area in 1903-
The average assessment per acre on 'dry' l
(maximum scale Rs. 2-4-0, minimum scal
'wet' land, Rs. 5-3-11 (maximum scale R
scale R. 0-4-0); on garden land, Rs. 3-15-6
Rs. 15, minimum scale Rs. 1-8-0).

Local boards.

In 1903-4, besides the Mysore city munic
were seventeen municipalities—Hunsūr, Chā
tore, Heggadadevankote, Gundalpet, Nanjang
Narsipur, Piriyāpatna, Bannūr, Talakād, Sering
Krishnarājpet, Malavalli, Nāgamangala, Meluk
Rocks—with a total income of Rs. 47,000, and
of Rs. 42,000; and also 8 village unions, co
from previously existing minor municipalities
Sāligrāma, Mirle, Kalale, Maddūr, Pālhalli, an
a total income and expenditure of Rs. 10,000
Outside the municipal areas, local affairs are
District and *tāluk* boards, which had an inco
and spent 1·1 lakhs, including Rs. 86,000
buildings.

Police and jails.

The police force in 1903-4 included 2 s
181 subordinate officers, and 1,210 consta
46 officers and 275 constables formed the
3 officers and 49 constables the special reserv
jail has accommodation for 447 prisoners. T
in 1904 was 200. In the 14 lock-ups the aver
of prisoners was 17.

Education.

The percentage of literate persons in 1901
city and 3·1 for the District (7·3 males and 0.
number of schools increased from 675 with
1890-1 to 778 with 23,126 pupils in 1900-1.
were 766 schools (458 public and 308 priva
pupils, of whom 3,379 were girls.

Medical.

Besides the general hospital at Mysore
23 dispensaries in the District, at which 250,0
treated in 1904, of whom 2,300 were in-pati
of beds available being 69 for men and 60 f
total expenditure was Rs. 82,000.

Vaccination.

The number of persons vaccinated in 1904
11 per 1,000 of the population.

Mysore Tāluk.—Central *tāluk* of Mysore
State, lying between 12° 7′ and 12° 27′ N.

76° 50′ E., with an area of 306 square miles. The population in 1901 was 133,840, compared with 134,684 in 1891, the decrease being chiefly due to plague. The *tāluk* contains Mysore City (population, 68,111), the head-quarters, and 163 villages. The land revenue demand in 1903–4 was Rs. 1,40,000. The north-west angle is bounded by the Cauvery and Lakshmantīrtha, but the main drainage flows south to the Kabbani. The country is undulating, and the principal height is the Chāmundi hill (3,489 feet). Channels from the Cauvery and Lakshmantīrtha irrigate some villages in the east and north-west. There are many tanks. The 'wet' lands have generally very good soil. The 'dry' lands vary, but are mostly shallow and stony. Coco-nut, areca-nut, betel-vines, plantains, and vegetables are largely grown around Mysore.

Hunsūr Tāluk.—Western *tāluk* of Mysore District, Mysore State, lying between 12° 8′ and 12° 35′ N. and 75° 55′ and 76° 31′ E., with an area of 660 square miles. The population in 1901 was 115,928, compared with 113,271 in 1891. The *tāluk* contains two towns, Hunsūr (population, 6,673), the head-quarters, and Piriyāpatna (3,872); and 412 villages. The land revenue demand in 1903–4 was Rs. 1,57,000. The Cauvery forms part of the western boundary. The Lakshmantīrtha runs through the south and east, and is crossed by several dams, from which channels are taken off. The principal hill is that of Bettadpur (4,389 feet). Westwards are low ranges, from which commences the great forest belt of the south-west of the District. The surface is very undulating. The north, centre, and east are open, with scrub jungle in places, and wild date-palms in the hollows. Much of the soil is rich red, with black soil in the north. Two 'dry' crops are raised in the year, especially in the south-west. Superior tobacco is grown near Bettadpur. Grazing is exceptionally good.

Yedatore.—North-western *tāluk* of Mysore District, Mysore State, lying between 12° 24′ and 12° 39′ N. and 76° 8′ and 76° 30′ E., with an area of 236 square miles. The population in 1901 was 82,330, compared with 74,262 in 1891. The *tāluk* contains three towns, Sāligrāma (population, 2,744), Yedatore (2,706), the head-quarters, and Mirle (2,602); and 177 villages. The land revenue demand in 1903–4 was Rs. 1,97,000. The Cauvery runs through the *tāluk* from north-west to south-east, receiving the Hemāvati from the north, and the Lakshmantīrtha from the south. The great feature of the *tāluk* is the irrigation from river channels drawn from dams on the

Cauvery. There is also a dam on the Lakshmantīrtha. About 140 tanks exist, 10 of which are large. The country is gently undulating, with neither hills nor jungle. Low scrub is met with on high ground, and sometimes groves of wild date-palms occur in the valleys. The soil is not of a high class. Only one crop of rice is raised in the year. *Rāgi* is the principal 'dry' crop. Tobacco is grown at Byādarhalli. The areca gardens suffered greatly in the famine of 1878.

Krishnarājpet.—Northern *tāluk* of Mysore District, Mysore State, lying between 12° 25′ and 12° 52′ N. and 76° 20′ and 76° 40′ E., with an area of 425 square miles. The population in 1901 was 102,816, compared with 91,453 in 1891. The *tāluk* contains two towns, Krishnarājpet (population, 2,131), the head-quarters, and Kikkeri (1,490); and 373 villages. The land revenue demand in 1903–4 was Rs. 1,89,000. The Hemāvati runs through the west of the *tāluk* from north to south into the Cauvery, which forms the southern boundary. In the east are several rocky hills. Five channels are drawn from the Hemāvati, and many large tanks are used for irrigation. The soil is red and fertile in the low grounds, but grey and sandy in the uplands, especially to the east. A coarse rice is grown in the east without irrigation. Coco-nut, betel-vine, and plantain gardens are productive. Much sugar-cane is grown. Silk cloths are made at Sindughatta.

Nāgamangala.—Northern *tāluk* of Mysore District, Mysore State, lying between 12° 40′ and 13° 3′ N. and 76° 35′ and 76° 56′ E., with an area of 401 square miles. The population in 1901 was 76,581, compared with 69,265 in 1891. The *tāluk* contains one town, Nāgamangala (population, 3,516), the head-quarters, and 366 villages. The land revenue demand in 1903–4 was Rs. 1,23,000. The Shimsha forms part of the eastern boundary, while the Lokapāvani has its source in the south-west. Rocky hills in the north and west are partly covered with scrub jungle. West of Nāgamangala is a hill of talcose argillite, like potstone, used for pencils. There are about 130 tanks, 30 of them being large. The soil is generally poor and *rāgi* is the staple crop. Rice is almost the only 'wet' crop. The areca gardens were destroyed in the famine of 1878, but some coco-nut trees survived. Sheep are abundant. Fine draught bullocks are bred, Karadihalli being the centre for the breed of Hallikār cattle.

Mandya.—North-eastern *tāluk* of Mysore District, Mysore State, lying between 12° 26′ and 12° 48′ N. and 76° 43′ and 77° 8′ E., with an area of 450 square miles. The population

in 1901 was 115,574, compared with 99,783 in 1891. The *tāluk* contains two towns, Mandya (population, 4,496), the head-quarters, and MADDŪR (2,597); and 300 villages. The land revenue demand in 1903-4 was Rs. 1,74,000. The Shimsha runs through the east of the *tāluk* from north to south. It is dammed north of Maddūr, and feeds several miles of channels for irrigation. The country is gently undulating, moderately wooded, and contains no jungle. The 'dry' crop soils are poor and gravelly, especially in the uplands to the north. Good red soil occurs in the centre and east of the Shimsha. The soils of 'wet' lands are of fine quality. Rice is the principal 'wet' crop. There is a good deal of mulberry in the east. The areca gardens were ruined in the famine of 1878. Inferior crops are grown after the harvest and ploughed in for manuring the rice-fields. Sheep are numerous, and a superior kind of blanket is made at Mandya and other places. Silkworms are largely reared, the cocoons being sent to Channapatna for reeling.

Seringapatam Tāluk.—Central *tāluk* of Mysore District, Mysore State, including the French Rocks sub-*tāluk*, and lying between 12° 18′ and 12° 44′ N. and 76° 32′ and 76° 55′ E., with an area of 274 square miles. The population in 1901 was 88,691, compared with 85,242 in 1891. The *tāluk* contains four towns, SERINGAPATAM (population, 8,584), the head-quarters, MELUKOTE (3,129), French Rocks (1,936), and Pālhalli (1,793); and 210 villages. The land revenue demand in 1903-4 was Rs. 2,07,000. The Cauvery runs through the south from west to east, receiving the Lokapāvani from the north. A line of hills runs north from the Cauvery, the prominent peaks of which are Karighatta (2,697 feet), French Rocks (2,882 feet), and Yadugiri (3,579 feet) at Melukote. The country, rising gradually on both sides of the Cauvery, is naturally fertile, and is irrigated by fine channels from the river, taken off from five or six dams. Rice and sugar-cane are generally grown. In the north-east are a few poorly populated wild tracts. The best gardens are those supplied by the channels.

Malavalli Tāluk.—Eastern *tāluk* of Mysore District, Mysore State, lying between 12° 13′ and 12° 33′ N. and 76° 54′ and 77° 20′ E., with an area of 391 square miles. The population in 1901 was 101,779, compared with 85,910 in 1891. The *tāluk* contains one town, MALAVALLI (population, 7,270), the head-quarters, and 231 villages. The land revenue demand in 1903-4 was Rs. 97,000. The Cauvery forms part of the southern boundary, receiving from the north the Shimsha,

into which all the waters of the *tāluk* flow. About the middl[e] of the southern boundary are situated the Falls of the CAUVERY on either side of the island of Sivasamudram. The *tālu[k]* generally is an undulating plain, except in the south-east where there are a State forest and several high hills, including KABBĀLDURGA (3,507 feet). In the south-west is Kundūrbett[a] (3,129 feet). The soil is rocky and shallow in the south-east and north-west, generally red mixed with sand elsewhere, and improves in the south-west, where there is some black soil. Mulberry is the chief garden crop. Some land is irrigated by channels. The Cauvery Power-works at Sivasamudram have recently attracted population.

Tirumakūdal-Narsipur.—Central *tāluk* of Mysore District, Mysore State, lying between 12° 6′ and 12° 26′ N. and 76° 47′ and 77° 8′ E., with an area of 225 square miles. The population in 1901 was 87,680, compared with 83,454 in 1891. The *tāluk* contains four towns, BANNŪR (population, 5,119), TALAKĀD (3,857), Tirumakūdal-Narsipur (2,406), the head-quarters, and Sosale (1,989); and 125 villages. The land revenue demand in 1903–4 was Rs. 1,47,000. The Cauvery runs through the *tāluk* from north-west to south-east, receiving in the centre the Kabbani from the west. An unbroken belt of 'wet' cultivation lies on both sides of the Cauvery, which is here a wide shallow river with sandy bed. Black soil abounds along its banks and in the lowlands, but in the uplands to the west the soil is very poor. Much of the rice land is *inām*, or revenue-free. There are a few isolated rocky hills.

Nanjangūd Tāluk.—Central *tāluk* of Mysore District, Mysore State, lying between 11° 51′ and 12° 14′ N. and 76° 27′ and 76° 56′ E., with an area of 384 square miles. The population in 1901 was 108,173, compared with 97,374 in 1891. The *tāluk* contains two towns, NANJANGŪD (population, 5,991), the head-quarters, and KALALE (2,500); and 206 villages. The land revenue demand in 1903–4 was Rs. 1,71,000. The Kabbani runs through the north of the *tāluk* from west to east, receiving from the south the Nugu and the Gundal. *Jola* is much grown. Gold-mining was commenced at Wolagere, south-west of Nanjangūd, but has been stopped on account of the poor prospects. In the north-west are quarries of potstone intermixed with schistose mica.

Yelandūr.—*Jāgīr* in the south-east of Mysore District, Mysore State, lying between 11° 53′ and 12° 8′ N. and 76° 59′ and 77° 11′ E., with an area of 102 square miles. The popula-

tion in 1901 was 35,271, compared with 31,784 in 1891. The *jāgīr* contains one town, Yelandūr, the head-quarters, and twenty-seven villages. This small but rich tract is one of the most fertile and densely populated in Mysore. On the east the BILIGIRI-RANGAN HILLS (highest peak 4,195 feet) run for about 10 miles north and south, covered with valuable forest and inhabited by the wild Sholigas. The rest of the *jāgīr*, north-west of these hills, is one compact level stretch of land, traversed from south to north by the Honnu-hole or Suvarnāvati, the sole source of irrigation. Except at the foot of the hills, the best quality of black soil prevails. In the east near the hills the soil is also good, being red and sandy. The garden crops are chiefly betel-vine, areca-nut, coco-nut, and mulberry, the latter grown in all kinds of land. Sugar-cane is irrigated from the larger tanks, and rice from the smaller. *Jola* is the staple 'dry' crop. There is very little *rāgi*. Much silk is produced and piece-goods are made; also brass lamps and vessels at Yeragamballi. The goods are principally sold at the markets of Santemarahalli (Chāmrājnagar *tāluk*) and Kollegāl (Coimbatore District). The Ganga, Chola, and Hoysala kings in turn ruled this part of the country. It was included in a principality called Padinād or Hadinād, and so continued under Vijayanagar. The last Rājā was in alliance with the Mysore and Kalale chiefs, his daughter being married to one of the latter. The Yelandūr *pandit* was Chikka Deva Rājā's faithful companion during his captivity at Hangala, before he came to the Mysore throne in 1672. The Lingāyat poet Shadakshara-deva, who wrote the *Rājasekharavilāsa* in 1657 and other well-known poems, belonged to the Danagūr *math* near Yelandūr. In 1807 Yelandūr was conferred as a *jāgīr* on the Dīwān Pūrnaiya for his eminent services to the State, and it is now held by his descendants, the recent Dīwān of Mysore being the head of the family. Yelandūr town, the chief place in the *jāgīr*, stands on the Honnu-hole, and has a population (1901) of 3,803. An inscription of the seventeenth century explains the name as Yeleyindūr, 'town of the young moon.' It is a thriving place, with many well-to-do inhabitants, and contains the *jāgīrdār's* residence and a Gaurīsvara temple, with good carving.

Chāmrājnagar Tāluk.—South-eastern *tāluk* of Mysore District, Mysore State, lying between 11° 40′ and 12° 8′ N. and 76° 43′ and 77° 12′ E., with an area of 487 square miles. The population in 1901 was 110,196, compared with 91,250 in 1891. The *tāluk* contains one town, CHĀMRĀJNAGAR

(population, 5,793), the head-quarter land revenue demand in 1903-4 was R watered by the Honnu-hole or Suva beyond the south border north into t crossed by two dams, from which chan porary dams are also made when the ri tanks are thus fed. The whole *tāluk* fertile, a fine well-watered level plain, s from the BILIGIRI-RANGAN HILLS, whi southern boundary. The soils range to poor and gravelly, the latter lying i staple 'dry' crop. Mulberry is grow the black soil. There is no cotton and gardens of areca-nut, coco-nut, and be the river are very fine. Some coffee is management. The wild date-tree is v the hollows. The original elephant kh to the south-east.

Gundalpet.—Southern *tāluk* of M State, lying between 11° 36′ and 12° 76° 52′ E., with an area of 535 square in 1901 was 74,897, compared with *tāluk* contains one town, Gundalpet (head-quarters, and 155 villages. The in 1903-4 was Rs. 91,000. The west by extensive forests, separated from th ranges of hills running parallel with the minating in the GOPĀLSWĀMI BETTA, si they diverge. The Gundal river flows south to north and has a dam for irrig along the south boundary, but in a ver the staple 'dry' crop, and *rāgī* is also 'wet' crops is small, but a superior Vijayapur tank, and betel-leaf of a s is largely grown. Wild date groves the Gundal and its feeders.

Heggadadevankote.—South-weste trict, Mysore State, lying between 11° 76° 7′ and 76° 31′ E., with an area of population in 1901 was 61,416, compar The *tāluk* contains two towns, Sargur Heggadadevankote (1,298), the head-q The land revenue demand in 1903-4 greater part is forest, especially in the

are bordered by Coorg and Wynaad. In the Kākankote State forest are the principal elephant kheddas. The east is mountainous. The KABBANI flows with a tortuous course from south-west to north-east, where it is joined by the Nugu, which runs through the east. The latter has a dam, but the principal irrigation channel is from a dam on the Lakshmantīrtha in the Hunsūr *tāluk*. Red and dark-brown soils are general, and two crops of *rāgi* are often produced in the year. 'Wet' cultivation is limited, partly owing to the unhealthiness of the irrigated tracts. This country was the ancient Punnāta, mentioned as Pounnata by Ptolemy, who describes it as containing beryl.

Bannūr.—Town in the Tirumakūdal-Narsipur *tāluk* of Mysore District, Mysore, situated in 12° 20′ N. and 76° 52′ E., 16 miles south-east of Seringapatam. Population (1901), 5,119. The Sanskrit name was Vahnipura, which became Banniyūr, and now Bannūr. This was an important place in the eighth and tenth centuries under the Gangas. In the twelfth century it was a great *agrahāra* named Jananāthachaturvedimangala, with 1,200 Brāhmans. Under Vijayanagar rule grants were made there by the Mysore Rājās and local chiefs. The municipality dates from 1899. The receipts and expenditure during the two years ending 1901 averaged Rs. 2,100 and Rs. 1,700. In 1903-4 they were Rs. 1,800 and Rs. 1,000.

Bettadpur Hill.—Isolated conical hill, 4,389 feet high, in the Hunsūr *tāluk* of Mysore District, Mysore, situated in 12° 27′ N. and 76° 7′ E. On the summit is a temple of Annadāni Mallikārjuna, the family god of the Changālva kings. At the foot of the hill is Bettadpur village, a settlement of the Sanketi Brāhmans.

Chāmrājnagar.—Head-quarters of the *tāluk* of the same name in Mysore District, Mysore, situated in 11° 55′ N. and 76° 56′ E., 22 miles south-east of Nanjangūd railway station. Population (1901), 5,973. The former name of the town was Arakottāra, and a Jain *basti* was built here in 1117. The present name was given in 1818 by the Mysore Rājā, whose father was born here. The Rājā built the large Chāmarājesvara temple and dedicated the town to his father's memory. It is a thriving place, in a fertile plain of black soil. To the east lies the populous suburb of Rāmasamudram, near to which are the ruins of an ancient city said to be Manipur. The municipality dates from 1873. The receipts and expenditure during the ten years ending 1901 averaged Rs. 1,900 and Rs. 2,000. In 1903-4 they were Rs. 3,800 and Rs. 3,900.

Gopālswāmi Betta.—Hill, 4,770 feet high
dalpet *tāluk* of Mysore District, Mysore, situated
and 76° 35′ E. The base is about 16 miles in
ascent is about 3 miles. The hill is generally
clouds and mist, whence its name of Himavad
but when clear it commands an extensive view
and the Wynaad. The Purānic name is
Dakshina Govardhangiri. It abounds in spring
eleventh century it was fortified by the Na
and from the end of the fifteenth to the middle
teenth century was the stronghold of the K
dakote chiefs, who were also rulers of the Nīlgiris
of Gopālswāmi (Vishnu), inside the fort, is visited

Hunsūr Town.—Head-quarters of the *tāluk*
name in Mysore District, Mysore, situated in
76° 18′ E., on the Lakshmantīrtha, 28 miles w
city. Population (1901), 6,673. It is the seat
Mahāl cattle-breeding establishment, and till 18
tannery, blanket manufactory, and timber-yard,
the Madras Commissariat. There are now ext
coffee-pulping works and saw-mills, under Euro
ment. The municipality dates from 1872. Th
expenditure during the ten years ending
Rs. 6,000. In 1903–4 they were Rs. 5,400 and

Kabbāldurga.—Fortified conical hill, 3,50
the Malavalli *tāluk* of Mysore District, Myso
12° 30′ N. and 77° 18′ E. The sides are very p
the summit is accessible only on one side, where
are cut in the solid rock. It was a penal settle
prisoners under the Hindu and Musalmān d
poisonous water and noxious climate, aided by
food, soon ended the lives of the victims confin
unfortunate Chāma Rājā and his wife were se
Dalavāyi Devarāj in 1734, and Morāri Rao,
chief of Gooty, by Haidar Alī, who gave the p
of Jāfarābād. In 1864 the guns were destr
guards removed.

Kalale.—Village in the Nanjangūd *tāluk* of M
Mysore, situated in 12° 4′ N. and 76° 40′ E.,
west of Nanjangūd. Population (1901), 2,50
is historically interesting as the ancestral
Dalavāyis of Mysore. It is said to have be
1504 by a connexion of the Vijayanagar fam
Mysore Rājās acquired Seringapatam in 1610,

alliance with the Kalale family, by which the latter furnished the Dalavāyi, or hereditary minister and general of the State, while Mysore furnished the Kartar (Curtur in old English documents) or ruler. Latterly the Dalavāyis rendered the Rājās subservient to their interests, but were in their turn displaced by Haidar Alī. The municipality formed in 1899 was converted into a Union in 1904. The receipts and expenditure during the two years ending 1901 averaged Rs. 1,990 and Rs. 650. In 1903-4 they were Rs. 870 and Rs. 2,800.

Maddūr.—Town in the Mandya *tāluk* of Mysore District, Mysore, situated in 12° 35′ N. and 77° 3′ E., on the Mysore State Railway, near the right bank of the Shimsha. Population (1901), 2,597. The name is properly Marudūr. Under the Gangas it was included in Chikka Gangavādi, and in the eleventh century was under the Cholas. Early in the twelfth century the Hoysala king Vishnuvardhana granted it to the Srīvaishnava Brāhmans as a *agrahāra*. He also made the Maddūr tank, and built the Varadarāja temple. The fort was taken by Mysore in 1617, and was rebuilt by Haidar, but dismantled in 1791 by Lord Cornwallis in his march on Seringapatam. The fine bridge over the Shimsha was completed in 1850, and since 1882 has been used for the railway as well as the road. The municipality dates from 1884, but was converted into a Union in 1904. The receipts and expenditure during the ten years ending 1901 averaged Rs. 670 and Rs. 800. In 1903-4 they were Rs. 850 and Rs. 1,200.

Malavalli Town.—Head-quarters of the *tāluk* of the same name in Mysore District, Mysore, situated in 12° 23′ N. and 77° 4′ E., 18 miles south of Maddūr railway station. Population (1901), 7,270. In the seventeenth century it was an important place, with a large fort, now ruinous. Haidar Alī gave Malavalli as a *jāgīr* to his son Tipū, who planted a large fruit garden near the tank, which is now occupied by paddy-fields. To the west of the town took place the battle in which Tipū Sultān was defeated by the British in 1799. After the action he had the place destroyed, to prevent its being of any use to the British. The establishment of the Cauvery Power-works at Sivasamudram has revived the importance of Malavalli. A small Faith Mission has a station here. The municipality dates from 1873. The receipts and expenditure during the ten years ending 1901 averaged Rs. 1,700. In 1903-4 they were Rs. 2,100 and Rs. 1,600.

Melukote.—Sacred town in the Seringapatam *tāluk* Mysore District, Mysore, situated in 12° 41′ N. and 76° 39′ on the Yadugiri hills, 16 miles north of French Rocks rail station. Population (1901), 3,129. It is the seat of Srīvaishnava Yatirāja *math*, founded by the reformer Rāmān who, fleeing from persecution by the Chola king, took up residence here for twelve years at the beginning of the twe century. He converted the Hoysala king, Bitti Deva Mysore, from the Jain faith, and received from him a gran all the country north and south of the Cauvery, afterwa known as ASHTAGRĀMA. In the fourteenth century Meluk suffered at the hands of the Musalmāns on their destruct of Dorasamudra, the Hoysala capital. The king retired Tondanūr, now TONNŪR, at the southern foot of the Yadu hills. The place was rebuilt about 1460 by the chief Nāgamangala, but in 1771 was sacked by the Marāthās a their defeat of Haidar at Chinkurali. The principal tem a large square building and very plain, is that of Cheluvap rāya or Krishna. More striking is that of Narasimha, pla on the very summit of the rock. From the early part of seventeenth century Melukote was under the special patron of the Rājās of Mysore. The inhabitants are mostly Brāhma of whom 400 are attached to the great temple, some of th being men of learning. There are also numerous tem servants of Sūdra extraction, musicians, dancing-girls, Sātānis. Some weavers and shopkeepers are the only pers who live by industry. Two classes of Holeyas or outcas called Tirukula and Jāmbavakula, have the privilege of enter the temple once a year to pay their devotions, in return their people having helped Rāmānuja to recover the imag Krishna when it was carried off to Delhi by the Muhammad Cloths of good quality are made here, and fragrant fan *khas-khas* grass. A fine white clay, said to have been covered by Emberumānār or Rāmānuja, is used for mal the *nāma* or sect mark on the forehead, and is transpo to distant places for that purpose, even to Benares. municipality dates from 1881. The receipts and expendi during the ten years ending 1901 averaged Rs. 1,400 Rs. 1,600. In 1903–4 they were Rs. 1,600 and Rs. 1,400

Mysore City.—The dynastic capital of the Mysore S and residence of the Mahārājā; also head-quarters of District and *tāluk* of the same name. It is situated 12° 18′ N. and 76° 40′ E., at the north-west base of Chāmundi hill, on the Mysore State Railway. The popula

fell from 74,048 in 1891 to 68,111 in 1901, the decrease being due to plague. The city covers an area of $7\frac{1}{2}$ square miles, and is divided into seven *muhallas*: namely, the Fort, Lashkar, Devarāj, Krishnarāj, Mandi, Chāmarāj, and Nazarābād. The original city is built in a valley formed by two ridges running north and south. In recent years it has been completely transformed by extensions to the north and west, and by the erection of many fine public buildings; but the old parts were very crowded and insanitary. A special Board of Trustees for improvements was formed in 1903, and Mysore promises to become a very handsome city in course of time. It is administered by a municipality, which in 1903–4 had an income of 2·2 lakhs, of which 1·2 lakhs was derived from taxes and Rs. 65,000 from octroi. The expenditure was 2·2 lakhs, including Rs. 39,000 on public works, Rs. 31,000 on conservancy, and Rs. 10,000 on education and charitable grants. Even in the past important sanitary measures have been carried out. In 1886 a complete system of drainage was provided for the fort, and the precincts of the palace were opened out and improved. One of the most beneficial undertakings was the filling in of the portentous great drain known as Pūrnaiya's Nullah, originally excavated in the time of that minister with the object of bringing the water of the sacred Cauvery into Mysore. It did not fulfil this purpose, and simply remained a very deep and large noisome sewer. Its place has now been taken by a fine wide road, called (after the Gaikwār of Baroda) the Sayāji Rao Road, flanked on either side by ranges of two-storeyed shops of picturesque design, called the Lansdowne Bazars. At the same time a pure water-supply was provided by the formation of the Kukarhalli reservoir towards the high ground on the west, from which water was laid on to all parts of the city in iron mains. This has since been supplemented by a high-level reservoir, the water in which is drawn from the Cauvery river near Anandūr, and forced up with the aid of turbines erected there. The new quarter, called (after the late Mahārājā) Chāmarājapura, more than doubled the area of the city. Conspicuous on the high ground to the west are the public offices, surmounted by a dome, standing in the wooded grounds of Gordon Park. Other prominent buildings in the vicinity are the Victoria Jubilee Institute, the Mahārājā's College, and the Law Courts. In 1897 the old palace in the fort was partially destroyed by fire; and this has given occasion for the erection of a new palace on the same spot of more modern design, constructed of durable and less combustible

materials. The opportunity has been taken to introduce some of the handsome porphyries and other ornamental stones found in Mysore, and stone-carvings on the lines of the famous ancient sculptured temples of the State are being used. Altogether, the new palace now approaching completion bids fair to be notable for its architecture and decorative features. The fort, which is the original nucleus of the city, is quadrangular, three of the sides being about 450 yards in length, and the remaining or south side somewhat longer. The palace in the interior was crowded round with houses, principally occupied by retainers. But open spaces have now been formed, and further improvements will follow the completion of the new building.

Mysore itself (properly Mahisūr, 'buffalo town') is no doubt a place of great antiquity, as it gave its name to the country as Mahisa-mandala in the time of Asoka in the third century B.C., and appears as Māhishmati in the Mahābhārata. Maisūr-nād is mentioned in inscriptions of the eleventh and twelfth centuries. The original fort is said to have been built in 1524. But the modern town, even before the extensive rebuilding of recent years, could not boast of any great age. Though Mysore was the ancestral capital of the State, it was superseded by Seringapatam, which was the seat of the court from 1610 till the downfall of Tipū Sultān in 1799. The latter ruler had demolished the fort, and conveyed the stones to a neighbouring site called Nazarābād, where he intended to erect a new fort. On the restoration of the Hindu Rāj in 1799, the stones were taken back and the fort rebuilt. At the same time the recently destroyed palace was erected, and the court removed to Mysore. Thus few standing remains can claim to be older than about a hundred years. Interesting buildings are the house occupied by Colonel Wellesley (the future Duke of Wellington), and the Residency (now called Government House), erected in 1805 in the time of Sir John Malcolm by Major De Havilland. This has lately been much altered and extended.

Nanjangūd Town.—Head-quarters of the *tāluk* of the same name in Mysore District, Mysore, situated in 12° 7′ N. and 76° 41′ E., near the Kabbani, on the Mysore State Railway. The population fell from 7,292 in 1891 to 5,991 in 1901, owing to plague. Early in the eleventh century the town seems to have been held by Danāyaks belonging to Bettadakote on the Gopālswāmi Betta. The place is noted for the temple of Nanjundesvara, which was endowed in the fifteenth century by

the Ummattūr chief, in the sixteenth century by the Vijayanagar kings, and latterly, in the nineteenth century, by the Mysore Rājās. The municipality dates from 1873. The receipts and expenditure during the ten years ending 1901 averaged Rs. 9,800 and Rs. 11,000. In 1903-4 they were Rs. 6,300 and Rs. 7,900.

Piriyāpatna.—Town in the Hunsūr *tāluk* of Mysore District, Mysore, situated in 12° 20′ N. and 76° 6′ E., 13 miles from Hunsūr. Population (1901), 3,872. Its original name was Singapattana, but the king who built the fort of stone and extended the place in the sixteenth century named it after himself. It was in the possession of the Changālva kings of Nanjarājpatna (in Coorg) till 1644, when it was taken by Mysore. The Coorg Rājā was confined here in the time of Tipū Sultān, but the fort was dismantled by the British on their advance against Seringapatam in 1791. The town is inhabited chiefly by traders, who export cotton, tobacco, and other commodities to Coorg, Cannanore, &c. A pack of hounds is maintained in the neighbourhood, which is regularly hunted by planters from Coorg and others. The municipality dates from 1898. The receipts and expenditure during the three years ending 1901 averaged Rs. 1,100 and Rs. 900. In 1903-4 they were Rs. 2,100 and Rs. 1,700.

Seringapatam Town (properly *Srīrangapattana*).—Headquarters of the *tāluk* of the same name in Mysore District, Mysore, situated in 12° 25′ N. and 76° 42′ E., on an island in the Cauvery, 10 miles north-east of Mysore city. The population fell from 12,553 in 1891 to 8,584 in 1901, chiefly owing to plague. The island on which the town stands is about 3 miles long and about 1 in breadth.

In the earliest ages Gautama Rishi is said to have had a hermitage here, and worshipped the god Ranganātha, whose temple is the principal building in the fort. The Gautama *kshetra* is a small island west of Seringapatam, where the river divides. Under two large boulders is the Rishi's cave, now closed up. In 894, during the reign of the Ganga kings, one Tirumalayya appears to have founded the temples of Ranganātha and Tirumala on the island, then overrun with jungle, and, enclosing them with a wall, called the place Srī-Rangapura. About 1117 the country on both sides of the Cauvery was bestowed by the Hoysala king on the reformer Rāmānuja, who formed the Ashtagrāma or 'eight townships' there, appointing over them his own agents under the designation of Prabhus and Hebbārs. In 1454 the Hebbār of Nāgamangala,

descended from one of these, obtained permission from the Vijayanagar king to erect a fort, and was appointed governor of the district, with the title of Danāyak. His descendants held it till 1495, when it passed into the direct possession of the Vijayanagar kings, who made it the seat of a viceroy known as the Sri Ranga Rāyal. In 1610 the Vijayanagar viceroy was ousted by the Rājā of Mysore, who made Seringapatam his capital. It was besieged on a number of occasions, but without success, the enemy being either repulsed or bought off. The most memorable of these sieges were: in 1638 by the Bijāpur army; in 1646 by Sivappa Naik of Bednūr; in 1697 by the Marāthās; in 1732 by the Nawāb of Arcot; in 1755 by the Sūbahdār of the Deccan; and in 1757 and 1759 by the Marāthās. Haidar took possession in 1761, and it was again besieged by the Marāthās in 1771. In 1792 and 1799 took place the two sieges by the British, previous to which the fort had been greatly strengthened and extended. On the former occasion Tipū Sultān submitted to the terms imposed; but in 1799 he prolonged resistance till the place was captured, losing his life during the assault. By this victory Seringapatam became the property of the British, who leased it to Mysore for Rs. 50,000 a year. At the rendition in 1881 it was given up to Mysore, the Bangalore cantonment being taken over instead as an 'Assigned tract.'

The historical interest of the place continues to attract many visitors, who view the site of the breach, the ramparts, the dungeons in which British prisoners were chained, and other parts in the fort itself. Outside the fort, on the east, is the Daryā Daulat, a pleasure garden, with a lavishly painted summer palace of Tipū Sultān's time, afterwards occupied by Colonel Wellesley (the future Duke of Wellington). On the walls are elaborate panoramic paintings of the defeat of Colonel Baillie at Pollilore in 1780, Haidar and Tipū in processions, and numerous representations of Rājās and other notabilities. Farther east is the suburb of Ganjam or Shahr Ganjam, to populate which Tipū forcibly deported 12,000 families from Sīra. East again of this is the Gumbaz or mausoleum of Haidar and Tipū, situated in what was the Lāl Bāgh, another pleasure garden with a palace of which nothing now remains. The island is watered by a canal which is carried across the south branch of the river by an aqueduct constructed by Tipū. In 1804 the Wellesley Bridge was built across the eastern branch by the Dīwān Pūrnaiya, and named after the Governor-General. It is an interesting specimen of

native architecture, being supported on rough stone pillars let into the rock in the bed of the river.

Since 1882 the railway has run through Seringapatam, the fort walls being pierced in two places for it. Several new buildings for office purposes have been erected, with a new bathing *ghāt* as a memorial to the late Mahārājā. These, and various municipal improvements, have given the place a more prosperous look than it had worn since the removal of the British garrison in 1809. The municipality dates from 1871. The receipts and expenditure during the ten years ending 1901 averaged Rs. 11,000. In 1903-4 they were Rs. 8,400 and Rs. 14,600.

Sivasamudram ('Sea of Siva').—An island in the Cauvery river, in the Kollegāl *tāluk* of Coimbatore District, Madras, situated in 12° 16′ N. and 77° 13′ E. It has given its name to the famous Falls of the CAUVERY, which lie on either side of it and which are referred to in the account of the river. The stream on both sides is very rapid and is fordable in only one place, and that with difficulty, even in the hot season. The island is thus a place of great natural strength, and was consequently in ancient days the site of a considerable town. Tradition ascribes the original foundation to a petty king from Malabar in the sixteenth century. His son and grandson held it after him, and it was then deserted for some years until reoccupied by a Mysore chieftain called Ganga Rāya. Some picturesque stories were gleaned about him and his successors by Buchanan[1] when he visited the place in 1800. They seem to have greatly extended the fortifications, remains of three lines of which still exist, to have built the temples and palaces with the ruins of which the island is strewn, and to have bridged the two arms of the river which surround it. The place remained in their family for only three generations, and they were then forcibly dispossessed by another local chieftain. The town shortly afterwards fell into ruins. In 1800 it was inhabited only by two Muhammadam hermits, other people being afraid of the demons and tigers which were declared to haunt it. In 1818 it was granted to a native gentleman named Rāmaswāmi Mudaliyār, who cleared away the jungle with which it had become overgrown and rebuilt the old bridges leading to it. Two temples, which are elaborately sculptured and contain inscriptions, still stand on the island. There is also the tomb of Pīr Walī, a Muhammadan saint, which is much reverenced by Musalmāns and is the scene of a large annual festival.

[1] *Mysore, Canara, and Malabar*, vol. i, p. 406 ff. (Madras reprint, 1870.)

Somnāthpur.—Village in the Ti
of Mysore District, Mysore, situated i
on the east bank of the Cauvery, 12
Population (1901), 1,468. It is note
temple, the most complete existing
Chālukyan style, erected in 1269 b
the Hoysala king Nārasimha III. F
hāra that formerly surrounded it.
of the Halebīd and Belūr temples, i
fection of its sculpture, and is one
monuments of the Mysore country.

Talakād.—Town in the Tirum
Mysore District, Mysore, situated in
on the north bank of the Cauvery
Mysore city. Population (1901), 3,
of the name is Talavanapura. It is
been the capital of the Ganga kin
eleventh century. It was then taken
threw the Ganga power. Under the
Rājarājapura, after the reigning Ch
was taken by the Hoysalas, who
Mysore. During their period it co
five *maths*. The associated town of
the opposite side of the river, was ca
the Hoysala power had come to an
the fourteenth century, the place passe
chiefs who were tributary to Vijayan
of Seringapatam retired on being ous
in 1610. According to tradition, th
possession of a costly jewel belong
In order to secure it he marched
taken by escalade. But the Rānī
river, and drowned herself opposite
uttering the threefold curse—'Let
Mālingi become a whirlpool; let the
heirs.' The old city of Talakād
beneath hills of sand, stretching fo
only the tops of two pagodas being
temples are said to lie beneath th
Nārāyana is occasionally opened w
access for certain ceremonies. The
uncovered by the sand is that o
advance of the sandhills, which
abandon their homes and retreat

somewhat checked of late by planting creepers and trees. But the people do nothing, deeming it useless to fight against the curse. A municipality was formed in 1899. The receipts and expenditure during the two years ending 1901 averaged Rs. 800 and Rs. 500. In 1903-4 they were Rs. 1,700 and Rs. 1,800.

Terakanāmbi.—Town in the Gundalpet *tāluk* of Mysore District, Mysore, situated in 11° 49′ N. and 76° 47′ E., 7 miles east of Gundalpet. Population (1901), 2,597. The town is evidently of great antiquity, though its early history is somewhat obscure. There is a general agreement that its name was formerly Trikadambapura, and that it grew out of a village called Kūdugallūr, where the *kūdugallu* or 'boundary stones' of three great countries met. On the point of junction a temple to Trikadamba was erected, it is said, in the sixth century. It probably marked the common boundary of the Ganga, Kerala, and Kadamba territories. After the Hoysalas, the early Vijayanagar kings added to the city, and the chiefs of Ummattūr held it. It was taken by the Rājā of Mysore in 1624. The fort was destroyed by the Marāthās about 1747. There are many deserted temples and disused tanks. Krishna Rājā III removed the principal god to Mysore, and the importance of the town has been superseded by Gundalpet.

Tonnūr.—Village in the Seringapatam *tāluk* of Mysore District, Mysore, situated in 12° 33′ N. and 76° 39′ E., 10 miles north-west of Seringapatam. Population (1901), 643. The name is properly Tondanūr. It was to this place that the last of the Hoysala kings retired after the destruction of Dorasamudra by the Muhammadans in 1326. There is a Musalmān tomb of the date 1358. Close by is the Moti Tālāb or 'lake of pearls,' a splendid tank formed by the Vaishnava reformer Rāmānuja early in the twelfth century, and named by him Tirumalasāgara. Its present name was given it in 1746 by the Sūbahdār of the Deccan, who camped here while negotiating with Seringapatam. It was breached and the water drained off by Tipū Sultān in 1798, to prevent its being used by the enemy besieging Seringapatam.

Ummattūr.—Village in the Chāmrājnagar *tāluk* of Mysore District, Mysore, situated in 12° 4′ N. and 76° 54′ E., 15 miles south-east of Nanjangūd railway station. Population (1901), 2,081. The Rājās of Ummattūr were among the most powerful chiefs in the south of Mysore. They had a fort on the island of Sivasamudram, where was the temple of their family god, and they also held parts of the Nīlgiris. At the beginning

of the sixteenth century Ganga Rājā assumed independe and acquired Bangalore District and other tracts, the wl being called the Sivasamudram country; and he even clai Penukonda. He was put down by Krishna Rāya of Vij nagar about 1510. The Ummattūr rulers were the earliest ri of the Rājās of Mysore, and on one occasion by a treache massacre nearly exterminated the Kalale chiefs, who were a of the latter. One infant, however, escaped, and grew u restore the fortunes of his family, and the Kalale chiefs bec the hereditary Dalavāyis of the Mysore State. The Vijayan viceroy at Seringapatam was disposed to make over his auth to the Ummattūr chief, who was in some way related to h but the Mysore Rājā secured it in 1610, and in 1613 t Ummattūr and annexed its possessions to Mysore. It is one of the endowments of the Chāmarājesvara templ Chāmrājnagar.

Hassan District.—District in the west of the Stat Mysore, lying between 12° 31′ and 13° 33′ N. and 75° 23′ 76° 38′ E., with an area of 2,647 square miles. It is bour on the north by Kadūr District; on the east by Tumkūr Mysore Districts; on the south by Coorg; and on the wes the South Kanara District of Madras.

Area and boundaries.

The main body of the District consists of the HEMĀ river basin. The only exceptions are the west of Manjarā which drains to the Netrāvati in South Kanara; and Arsikere *tāluk*, whose waters run north to the Vedāva Chitaldroog District. The Cauvery flows through a s portion of the south. The course of the Hemāvati is first s in Manjarābad, then east from the Coorg border to be Hole-Narsipur, where it turns south and runs into the Ca in Mysore District. Its chief tributary is the Yagachi fro Belūr *tāluk*, which joins it near Gorūr in the Hassan The Manjarābād side of the District, resting on the br the Western Ghāts, forms part of the Male-sīme or Malnā 'hill country,' the remainder being Maidān or Bayal-sīm 'plain country,' also called Mūdu-sīme or 'east country.' mountains forming the western limit extend from Jenka in the north to the Bisale *ghāt* in the south, including i grand panorama the superb Jenkalbetta (4,558 feet), Mū gudda (4,265 feet), Devarbetta (4,206 feet), and the tow height of Subrahmanya or Pushpagiri (5,626 feet). Low r of granitic hills run along the north, through the Belūr, H and Arsikere *tāluks*, marking the watershed which separat Kistna and Cauvery river systems. Indrabetta at Sr

Physical aspects.

Belgola (3,309 feet) is noted for the colossal Jain statue on its summit. Some low hills pass through the Hole-Narsipur *tāluk* towards Hassan and Channarāyapatna. The Malnād or highland region occupies the whole of Manjarābād and the west of Belūr. It has been thus graphically described :—

'The country is generally undulating till on approaching the Ghāts, when it becomes precipitous. Perhaps there is no scenery in India more beautiful than the southern part of this tract, adjoining the north-west of Coorg. It for the most part resembles the richest park scenery in England. Hills covered with the finest grass or equally verdant crops of grain, adorned and crowned with clumps of noble forest trees, in some instances apparently planted most carefully, and certainly with perfect taste. The highest and the most beautiful knolls have been generally selected as the spots on which to build the small *maths* and other places of worship with which the country abounds, and the groves that surround or are in the vicinity of these are tended with the greatest care, and the trees composing them replaced as they die off or are blown down. The southern differs from the more northerly and westerly parts in the absence of those dense jungles which obscure the view, and in the soft character of the hills, which are in most instances quite free from the stunted date, and smooth as the lawn of a villa on the Thames. But the whole *tāluk* is beautiful, and less wooded than Coorg or Nagar, though greatly partaking of the features of both.'

The Maidān or lowland tract, forming the largest and most populous portion of the District, consists of an undulating plain country, generally cultivated, but having extensive *kāvals* or grazing lands. Patches covered with the wild date are common, and in some parts are limited tracts of stunted jungle growing upon a gravelly, gritty soil. The high-lying lands, particularly in the Hassan, Channarāyapatna, and Hole-Narsipur *tāluks*, have a singularly bare and bleak appearance, and are frequently so stony that they are unfit for cultivation. They form, however, good catchment basins for tanks, and the valleys below are rich and well wooded.

Throughout the District, kaolin, felspar, quartz, and other (materials suitable for the manufacture of earthenware are abundant. *Kankar*, a tufaceous nodular limestone, is found in many parts, and is the only form of limestone known. It occurs in alluvial valleys and on the banks of some streams, under or mixed with coloured clay. Potstone, from which the images a Halebīd are carved, is found at places in the Hassan and Belū *tāluks*. Hematite iron ore is obtained from the Bāgadi hil in the Arsikere *tāluk*, associated with granitic rocks, broken

trap protrusions. Gold-mining was commenced a few years ago at Hārnhalli and Kempinkote, but has been abandoned on account of the poor results obtained.

Botany.

The vegetation found in this District is generally the same as in Kadūr District and in Coorg. The portion occupying the Western Ghāts (eastern face) possesses a splendid arborescent flora perhaps unrivalled in any other part of India.

Climate and rainfall.

The temperature of Hassan is slightly lower than that of Bangalore, the mean reading of the thermometer being 73°, and the daily range about 20°. The maximum has reached 98° in April, while the minimum has touched 43° in January. The heat during the months of March and April is much modified by the sea-breeze from the western coast, and by light fogs in the mornings and evenings. The temperature of the Malnād is some degrees lower, but this scarcely compensates for the malaria which is prevalent. European settlers generally suffer from fever after the early rains; but they soon grow acclimatized, and are ultimately better able to withstand it than the natives themselves, numbers of whom succumb each year to its attacks. The annual rainfall at Hassan averages 33 inches. But the country bordering on the Western Ghāts has a much heavier fall; the annual average at Sakleshpur being 84 inches, and at Aigūr as high as 100. Even this is exceeded at some of the western coffee estates; the average at Byakarvalli estate being 110 inches, and at Hulhalli estate 120. During the south-west monsoon, May to August, the rainfall is continuous, with a few slight breaks. The *sone* or drizzling rain extends as far as Grāma, 8 miles east of Hassan, and the condition of the surrounding vegetation distinctly shows the lines of demarcation which separate the Malnād from the Maidān country. The north-east monsoon also reaches the District, and the heavy rain in October is of great value in filling the tanks in the Maidān.

History.

The earliest event supported by any evidence was a migration of Jains from Ujjain under the leadership of Bhadrabāhu, in order to escape a dreadful famine of twelve years' duration which he had predicted. He was accompanied by Chandra Gupta, said to be the great Maurya emperor. While the emigrants were on their way to Punnāta (south Mysore), Bhadrabāhu died at Sravana Belgola, attended in his last moments by Chandra Gupta, who remained there till his own death twelve years later. These occurrences are recorded in ancient rock inscriptions at Sravana Belgola. They invested the place with a sanctity which led to the well-known Jain

settlement there. The country is said to have been prosperous and well populated, but to whom it belonged is not stated. The Kadambas, whose capital was at Banavāsi, were ruling in the west of the District in the fourth and fifth centuries, and also again in some part of the eleventh. But the greater portion of the country was under the Gangas, whose inscriptions occur in all parts. Their general and minister, Chāmunda Rāya, erected the colossal Jain image of Gomata on the highest hill at Sravana Belgola about 983. The Cholas overthrew the Ganga power in 1004, and the Changālvas in the south-west and the Kongālvas in Arkalgūd became subject to them. But the rise of the Hoysalas stopped their progress farther north. These sprang from a line of chiefs in the Western Ghāts to the north of Manjarābād, and made Dorasamudra (now Halebīd in the Belūr *tāluk*) their capital. Vishnuvardhana of this line, about 1116, drove the Cholas out of Mysore. Ballāla II (1173–1209) carried the Hoysala dominions up to the river Kistna, making Lakkundi in Dhārwār his residence for some time. The king Somesvara (1233–54) extended the kingdom southwards over the Chola country, where he took up his abode at Kannanūr near Trichinopoly. The Hoysala power was brought to an end in the fourteenth century by Muhammadan invasions from Delhi. But in 1336 was founded the Vijayanagar empire, under which the Manjarābād country and Belūr were given to a line of chiefs who continued in power with intervals till the nineteenth century. Meanwhile most of the District had been conquered by the Mysore Rājās in the seventeenth century. The Channarāyapatna fort was built in 1648 by treaty with Bijāpur, no doubt to mark the limits of the two territories. Sivappa Naik, the Keladi chief of Bednūr, opposed the Mysore conquests, and not only held Manjarābād but bestowed Belūr and other parts on the fugitive Vijayanagar king, who had taken refuge with him, even invading Seringapatam in 1646 on his behalf. Peace was eventually concluded between the two powers in 1694, by which six *nāds* of Manjarābād were restored to the old chiefs, and the rest divided between the contending parties. When Haidar Alī subdued Bednūr in 1763, Manjarābād was allowed to remain in the hands of the chiefs on paying tribute. After the fall of Seringapatam it was absorbed into Mysore.

Archaeology.

Within this District are included some of the most remarkable archaeological monuments in India. Of the colossal Jain image of Gomata at Sravana Belgola, Fergusson says—

'Nothing grander or more imposing exists a
Egypt.' It is a monolith, 57 feet high, in th
nude, with no support above the thighs, anc
summit of a granite hill 400 feet high. It
Chāmunda Rāya, as inscribed at its foot i
Kanarese, and Tamil languages, in Nāgarī, Hal
Grantha and Vatteluttu characters respectivel
about 983, and it belongs to the Ganga period
tectural monuments, the Chenna Kesava temp
the Hoysalesvara at Halebīd take the first rank
the Chālukyan style, and were erected unde
in the eleventh and twelfth centuries. Fergus
great temple at Halebīd, as one of the building
advocate of Hindu architecture would desire to
and he says that the minute elaboration of the
may probably be considered as one of the n
exhibitions of human labour to be found even
East. The artistic combination of horizonta
lines, and the play of outline and of light
surpass anything in Gothic art. The effects
mediaeval architects were often aiming at, b
never attained so perfectly as was done at
ruined Kedāresvara at Halebīd, which is now
he pronounced to be one of the most exquisi
Chālukyan architecture in existence, and one
typical. There are also striking examples of
in ruined temples at Arsikere, Hārnhalli, Kor
Kadlūr, and other places in the District. The
the District have been translated and published

The people. The population at each Census in the last t
(1871) 518,987, (1881) 428,344, (1891) 511,
568,919. The decrease in 1881 was due to the fa
By religion, in 1901 there were 541,531
Musalmāns, 5,035 Animists, 3,795 Christians,
16 'others.' The density of population was
square mile, that for the State being 185.
towns is 14, and of villages 2,546. The hea
HASSAN TOWN (population, 8,241).

The table on the next page gives the prin
population in 1901.

Castes and occupations. The Wokkaligas or cultivators number 173,
Holeyas and Mādigas, 93,000 and 12,000; L
Kuruba or shepherds, 45,000. Of Brāhmans
The nomad Lambānis are 3,000 strong, ar

that number. Of Musalmāns the most numerous are Shaikhs, 11,000. By occupation, 81 per cent. are engaged in agriculture and pasture; 6 per cent. in the preparation and supply of material substances; 5·5 per cent. in unskilled labour not agricultural; and 2·5 per cent. in the State service.

Tāluk.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Hassan	475	3	568	125,961	265	+ 11·1	6,018
Belūr	339	1	410	79,192	234	+ 9·2	3,535
Arsikere	486	3	354	79,588	164	+ 21·9	3,394
Channarāyapatna	415	2	396	90,950	219	+ 16·3	2,715
Hole-Narsipur	233	1	238	57,149	246	+ 12·3	1,645
Arkalgūd	261	3	303	76,775	294	+ 1·3	2,866
Manjarābād	438	1	277	59,304	135	+ 6·2	3,233
District total	2,647	14	2,546	568,919	215	+ 11·1	23,406

Christian missions.

The number of Christians is 3,795, of whom 3,554 are natives. At Grāma there was a Roman Catholic chapel in the eighteenth century, which was protected by a Muhammadan officer and thus escaped destruction at the hands of Tipū Sultān. Sathalli is the centre of an agricultural community established by the Abbé Dubois early in the nineteenth century. The Wesleyan Mission has a station at Hassan town. Church of England chaplains at Bangalore visit Arsikere for the railway staff there.

General agricultural condition.

The soil of the Malnād is a rich red sedimentary deposit, with forest loam in the jungles, and a red laterite soil on the grass-covered hills. The hills are of primitive formation, chiefly granitic, with a little iron ore. The products of this part are rice in the valleys, and coffee and cardamoms on the forest slopes. The soils in the plains surrounding the hills are generally of a rich sedimentary character, easily worked and yielding fine crops of cereals or garden produce. On the tops of the rising ground the soil is generally thinner and more sandy or gravelly than in the valleys, where it tends rather to be clayey and dark in colour. There are also other extensive tracts with a gravelly sandy soil, resulting from the disintegration *in situ* of the primitive schists superimposed upon the granite. Black soil occurs, but only to a small extent and in patches, chiefly in the Arkalgūd, Channarāyapatna, and Arsikere *tāluks*.

Chief agricultural statistics and principal crops.

The following table gives statistics of cultivation for 1903-4:—

Tāluk.	Area in square miles, shown in the revenue accounts.				
	Total.	Cultivated.	Irrigated.	Forests.	Cultivable waste.
Hassan	439	171	41	31	22
Belūr	296	121	39	1	22
Arsikere	481	160	8	100	54
Channarāyapatna	411	200	16	1	33
Hole-Narsipur	204	91	9	5	82
Arkalgūd	231	120	13	26	6
Manjarābād	428	126	49	59	29
Total	2,490	989	175	223	248

The grain principally cultivated in the Malnād is rice, which, though of an inferior quality, grows most luxuriantly in the long winding valleys and in fields cut in terraces on their sides, and is almost entirely dependent on the rainfall. The rice cultivated in the north-west of the Hassan *tāluk*, and that grown in the Maidān *tāluks* on land irrigated by channels from the rivers, is of a superior kind, and bears comparison with the best table rice of Southern India. In other places in the Maidān country the crop is dependent on irrigation from tanks. In a few places where irrigation is deficient, a coarse rice called *bhar-doddi* is raised, chiefly in the Arkalgūd, Hole-Narsipur, and Channarāyapatna *tāluks*. The sugar-cane grown is generally of inferior kinds. The rise in the price of rice, combined with years of drought, has lessened the former popularity of coco-nut and areca-nut gardens. The most valuable of these are in the Arkalgūd *tāluk*, where many of the Brāhman proprietors work in the gardens themselves. The areca-nut is known as the *wolāgra*, and is not held in such high repute as that of Nagar. The coco-nuts of the Arsikere *tāluk*, which are allowed to remain on the tree till they drop, are much prized, and are largely exported in a dry state to Tiptūr for the Bangalore and Bellary markets. Plantains of good quality are grown to a considerable extent, and formerly every ryot had a few trees at the back of his house; but the cultivation has gradually yielded to that of coffee, which ranks as one of the most important products of the country. The rich red loam of the primaeval forests which cover the slopes of the Malnād hills is found to be well adapted for its growth. The cultivation of the berry, introduced first from Mecca by Bābā Budan on the hills which bear his name in Kadūr Dis-

trict, was gradually extended into Manjarābād, and when the British took over the administration of the country in 1831 was beginning to attract some attention. It did not, however, become general till the first European plantation was opened in 1843. Since then others have taken up jungle lands and invested capital largely in the enterprise. Every native in the Malnād has a few coffee-trees planted at the back of his house, and the *pātels* and principal *gaudas* have extended this cultivation till it embraces in small plots the whole of the jungles in which their villages are situated. This industry, not long ago so flourishing, is at the present time in a most depressed condition, owing to the great fall in prices due to the competition of South America. The cardamom plant is indigenous, growing wild in the densely wooded ravines on the verge of the Western Ghāts. Its systematic cultivation has for some years been undertaken on a large scale. Though the soil in many parts is favourable, little attention has been paid to the cultivation of wheat and cotton. The former is grown in the Arsikere *tāluk*, and the latter in that and the Arkalgūd *tāluk*. Tobacco is grown to some extent on dry lands in parts of the Arsikere, Belūr, and Arkalgūd *tāluks*. Arkalgūd tobacco is much prized for snuff; but that of Hārnhalli and Belūr is of inferior quality, and chiefly sold on the west coast for chewing. Of the cultivated area in 1903-4, rice occupied 162 square miles, *rāgi* 141, other food-grains 84, gram 101, coffee 69, oilseeds 54, garden produce 36, and sugar-cane 8.

Agricultural loans. During the twelve years ending 1904 Rs. 58,000 was advanced as agricultural loans for land improvement, and Rs. 14,000 for irrigation wells.

Irrigation. The area irrigated from canals is 19 square miles, from tanks and wells 128, from other sources 28. The length of channels drawn from rivers is 153 miles, and the number of tanks 5,944, of which 231 are classed as 'major.'

Forests. The area of State forests is 184 square miles, of 'reserved' lands 37, and of plantations 2. The forest receipts in 1903-4 were Rs. 1,18,000, the chief item being sandal-wood.

Mines and quarries. The unsuccessful attempts at gold-mining at Hārnhalli and Kempinkote have already been referred to. A certain quantity of soapstone is quarried for use in making images and large water-vessels. Laterite is very generally employed in the Malnād for building purposes. A little iron ore is smelted at Bāgadi in the Arsikere *tāluk*. It is used chiefly for agricultural implements.

Arts and Good cotton cloth is manufactured at Hole-Narsipur. In

manufactures. other parts only the coarsest kinds are made. The at Channarāyapatna and Hole-Narsipur make small silk, such as purses, cords, and tassels. The woolle worn by the peasantry are made by the Kuruba o class in all *tāluks* except Manjarābād. The man brass and copper vessels is virtually a monopoly o at Sravana Belgola. Their pots are of excellent meet with a ready sale at Mysore, and at the gr festival at Subrahmanya in South Kanara. Oils (gingelly) are mostly exported to Kanara, Coorg, an in Kadūr District. Gunny-bags are made in the Hole-Narsipur, and Channarāyapatna *tāluks*, and b export of grain are also made from the bark of a *gaja mara* or 'elephant-tree.' The trunk is steeped after which the bark is removed entire by thras which state it is not unlike the leg of an elephan are reported to be 1,617 looms for cotton, 646 16 for other fibres, 299 oil-mills, and 291 for sugar a

Commerce and trade. The trade of the country is chiefly in the hands of who frequent the different markets. There are the merchants resident in the District of any wealth tance. In addition to coffee, the articles exported food-grains. The imports consist of iron, Europe and woollens, *ghī*, areca-nuts and coco-nuts, and great rice market is at Alūr in the Hassan *tāluk*. It i by the ryots of the Malnād, who bring their ric quantities for sale, and by purchasers who come distances with carts and droves of bullocks for veyance of the rice purchased. Other importan places are Yesalūrpet, Kenchammana Hoskote, and rāyapatna.

Means of communication. The Southern Mahratta Railway from Bangalore runs for 17 miles through the north-east of the Dist length of Provincial roads is 173 miles, and of Di roads 444 miles.

Famine. Since the general famine ending in 1878, th though sometimes affected by high prices of food-g not been exposed to scarcity amounting to fam areca gardens suffered severely in the drought which in 1898.

Divisions. The District is divided into seven *tāluks*: Arka kere, Belūr, Channarāyapatna, Hassan, Hole-Nar Manjarābād. The following subdivisions were 1903 under Assistant Commissioners: Hassan and

Manjarābād and Belūr, with head-quarters at Sakleshpur; Channarāyapatna, Arsikere, and Hole-Narsipur, with head-quarters at Hassan town.

The District court at Mysore has jurisdiction over the whole of Hassan District, and the Subordinate Judge's court at Mysore over a part. There is a Subordinate Judge's court at Hassan for the remainder, and a Munsif's court at Hole-Narsipur. Owing to its position on the border of other jurisdictions, serious crime, such as dacoity, is not uncommon. Judicial.

The land revenue and total revenue are shown below, in thousands of rupees:— Land revenue.

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . .	9,60	10,58	12,07	11,56
Total revenue . .	11,25	14,54	17,25	16,99

The revenue survey and settlement were introduced in the north between 1877 and 1879, in the west in 1881 and 1882, in the south in 1883 and 1884, and in the east in 1885. The incidence of land revenue per acre of cultivated area in 1903-4 was Rs. 1-12-5. The average assessment per acre on 'dry' land is R. 0-13-7 (maximum scale Rs. 2-8-0, minimum scale R. 0-2-0); on 'wet' land, Rs. 3-14-7 (maximum scale Rs. 10, minimum scale R. 0-2-0); and on garden land, Rs. 4-4-11 (maximum scale Rs. 16, minimum scale Rs. 1-8-0).

In 1903-4 there were eight municipalities—Hassan, Alūr, Sakleshpur, Belūr, Arsikere, Channarāyapatna, Arkalgūd, and Hole-Narsipur—with an income of Rs. 37,000 and an expenditure of Rs. 40,000. There were also six village Unions—Bānāvar, Hārnhalli, Konanūr, Grāma, Sravana Belgola, and Basavāpatna—whose income and expenditure were Rs. 6,000 and Rs. 11,000. The District and *tāluk* boards, which deal with local affairs outside these areas, had an income of Rs. 71,000 and spent Rs. 79,000, including Rs. 16,000 on roads and buildings. Local boards.

The police force in 1903-4 consisted of one superior officer, 73 subordinate officers, and 392 constables. There were 8 lock-ups, containing a daily average of 26 prisoners. Police and jails.

The percentage of literate persons in 1901 was 4·1 (7·7 males, 0·4 females). The number of schools increased from 331 with 7,614 pupils in 1890-1 to 442 with 10,167 pupils in 1900-1. In 1903-4 there were 442 schools (169 public and 273 private) with 9,117 pupils, of whom 1,165 were girls. Education.

Medical. Besides the Civil Hospital at Hassan, there are 14 dispensaries, at which 93,487 patients were treated in 1904, of whom 692 were in-patients, the number of beds available being 30 for men and 30 for women. The total expenditure was Rs. 25,000.

Vaccination. There were 3,817 persons vaccinated in 1904, or 10 per 1,000 of the population.

Hassan Tāluk.—Central *tāluk* of Hassan District, Mysore, containing the Alūr sub-*tāluk*, and lying between 12° 48′ and 13° 13′ N. and 75° 53′ and 76° 19′ E., with an area of 475 square miles. The population in 1901 was 125,961, compared with 113,397 in 1891. The *tāluk* contains three towns, HASSAN (population, 8,241), the head-quarters, GRĀMA (1,936), and Alūr (1,299); and 568 villages. The land revenue demand in 1903–4 was Rs. 2,66,000. The Hemāvati river forms the southern boundary, receiving from the north the Yagachi and another stream. A dam on the Yagachi supplies a channel 6 miles long. In the north is a group of hills called Sīgegudda. There are also some low hills in the south. The south-west is purely Malnād, the chief cultivation here being a superior rice, with a little coffee. In the east, villages are far apart, but there are wide stretches of pasturage, supporting large flocks of sheep. The Sīgegudda grazing-ground of the Amrit Mahāl can maintain 2,500 head of cattle. The best soil is near the Yagachi river. *Rāgi* is the staple 'dry' crop, with chillies and castor-oil in soil not suited for that grain.

Belūr.—North-western *tāluk* of Hassan District, Mysore, lying between 12° 58′ and 13° 19′ N. and 75° 44′ and 76° 7′ E., with an area of 339 square miles. The population in 1901 was 79,192, compared with 75,470 in 1891. The *tāluk* contains one town, Belūr (population, 3,862), the head-quarters, and 410 villages. The land revenue demand in 1903–4 was Rs. 1,81,000. The west is a part of the Malnād, and for a short distance is bounded by the Hemāvati river. The Yagachi flows through the centre in a south-easterly direction, being joined in the north by the Berinji-halla. In the forests of the hill country to the west are coffee plantations, while rice is grown in the valleys. In the east are rocky hills, either bare or covered with scrub jungle. The centre is more level, with either gravelly and grassy plains, or stretches of rice land. Some small channels are drawn from the Yagachi and the streams falling into it. The soils are poor in the west but improve eastwards, much of the best description being around Halebīd and Belūr. In the south-west the high ground,

instead of sloping gradually to the lower, drops abruptly in perpendicular scarps 50 to 100 feet high. Good tobacco is grown in the east.

Arsikere.—Northern *tāluk* of Hassan District, Mysore, lying between 13° 5′ and 13° 33′ N. and 76° 2′ and 76° 26′ E., with an area of 486 square miles. The population in 1901 was 79,588, compared with 65,306 in 1891. The *tāluk* contains three towns, Arsikere (population, 3,565), the head-quarters, Bānāvar (2,422), and Hāranhalli (2,117); and 354 villages. The land revenue demand in 1903–4 was Rs. 1,62,000. The surface is very undulating. In the west is a chain of rocky hills, covered with scrub jungle. In the north are the Hirekalgudda hills, on which is the temple of Mālekal Tirupati. The drainage is northwards to the Vedāvati river, but there are few streams or tanks. In the south are several Amrit Mahāl grazing-grounds, and a good stamp of cattle is bred, which is in some demand in the Malnād. The prevailing soil is grey and stony. *Rāgi* is grown everywhere, while in the west and south chillies are largely cultivated for the Malnād. Coco-nuts allowed to remain on the tree till they drop, called *kobri*, are much prized, and are exported to Tiptūr for the Bangalore and Bellary markets. They are grown in the north in low-lying ground without irrigation.

Channarāyapatna.—Eastern *tāluk* of Hassan District, Mysore, lying between 12° 46′ and 13° 10′ N. and 76° 16′ and 76° 38′ E., with an area of 415 square miles. The population in 1901 was 90,950, compared with 78,211 in 1891. The *tāluk* contains two towns, Channarāyapatna (population, 3,222), the head-quarters, and SRAVANA BELGOLA (1,926); and 396 villages. The land revenue demand in 1903–4 was Rs. 1,97,000. The Hemāvati river is the boundary for a short distance on the south-west, and its tributaries form some large tanks. A high ridge runs along the north, some small streams from which flow to the Shimsha. The country is generally open and undulating. The principal heights are the peaks at Sravana Belgola. There are large pasture grounds for cattle and sheep.

Hole-Narsipur Tāluk.—South-eastern *tāluk* of Hassan District, Mysore, lying between 12° 36′ and 12° 56′ N. and 76° 9′ and 76° 22′ E., with an area of 233 square miles. The population in 1901 was 57,149, compared with 50,894 in 1891. The *tāluk* contains one town, HOLE-NARSIPUR (population, 6,526), the head-quarters, and 238 villages. The land revenue demand in 1903–4 was Rs. 87,000. The Hemāvati river runs

through the north, and turning south forms part of the ea
boundary. Two channels, 47½ miles and 12 miles long, d
from the Srīrāmadeva dam, irrigate 5,020 acres. Excep
this the *tāluk* is sterile, the soil being generally very poor,
bleak uplands in the south. Near Hole-Narsipur are a
isolated hills.

Arkalgūd.—Southern *tāluk* of Hassan District, My
lying between 12° 31′ and 12° 50′ N. and 75° 56′
76° 12′ E., with an area of 261 square miles. The popula
in 1901 was 76,775, compared with 75,812 in 1891.
tāluk contains three towns, Arkalgūd (population, 4,903),
head-quarters, Konanūr (2,328), and Basavāpatna (1,6
and 300 villages. The land revenue demand in 1903–4
Rs. 1,25,000. The Hemāvati river forms the northern b
dary, and the Cauvery runs through part of the south.
rice crop served by the river channels is one of great yield
certainty. Near the large tanks rice is followed by a cro
onions, which is very profitable. The west of the *tāluk* u
the borders of Coorg is jungly and hilly. In the south
numerous coco-nut and areca-nut gardens, but the areca-nu
the coarse variety called *godu*. On the high watershed in
centre much tobacco is grown, which is converted into snuf

Manjarābād.—Western *tāluk* of Hassan District, Mys
lying between 12° 40′ and 13° 3′ N. and 75° 33′ and 75° 57′
with an area of 438 square miles. The population in 1
was 59,304, compared with 55,862 in 1891. The *tāluk* c
tains one town, Sakleshpur (population, 2,140), the he
quarters, and 277 villages. The land revenue demand
1903–4 was Rs. 1,78,000. The whole *tāluk* is Malnād,
contains some of the most beautiful scenery in Mysore, flan
by the stupendous mountain range of the Western Ghāts, wh
slopes are covered with magnificent forest. The Hemā
river runs through the east, and receiving the Aigūr and
Kotehalla, turns east along the southern border. East of
river the country is more open. Streams from the West
Ghāts run west down to the Netrāvati in South Kanara.
soil on the hills is generally a rich red, in the valleys red
nearly black. The principal cultivation is rice, which gr
luxuriantly in the valleys and on the terraces cut on the h
sides. The abundant rain makes irrigation unnecessary a
rule. 'Dry' cultivation is found to the east of the Hemāv
In the west *rāgi* is grown in small patches once in two
three years, or at longer intervals. During the past h
century coffee cultivation has spread over the whole *tāluk*, a

through the investment of European capital and the settlement of European planters has changed the face of the country, revolutionizing its old feudal customs. Cardamoms are also grown on the Ghāts.

Grāma.—Village in the east of the Hassan *tāluk* of Hassan District, Mysore, situated in 12° 59′ N. and 76° 13′ E., 7 miles east of Hassan town. Population (1901), 1,936. The place was founded in the twelfth century by Sāntala Devī, queen of the Hoysala king Vishnuvardhana, and called at first Sānti-grāma. A municipality formed in 1893 was converted into a Union in 1904. The receipts and expenditure during the eight years ending 1901 averaged Rs. 800 and Rs. 700. In 1903–4 they were Rs. 800 and Rs. 2,000.

Halebīd.—Village in the north-east of the Belūr *tāluk* of Hassan District, Mysore, situated in 13° 13′ N. and 76° 0′ E., 18 miles south-west of Bānāvar railway station. Population (1901), 1,524. *Halē-bīdu*, 'old capital,' marks the site of Dorasamudra or Dvārāvatipura, the wealthy capital of the Hoysala kings, founded early in the eleventh century. The city was taken by the Moslem general Malik Kāfūr in 1310, and plundered of immense wealth. In 1326 another Moslem army carried off what remained, and totally destroyed the city. Its splendour is attested not only by the fabulous riches obtained by its conquest, as stated by Muhammadan historians, but by its architectural monuments, which still rank among the masterpieces of Hindu art. The most remarkable are the Hoysalesvara and Kedāresvara temples, the latter unfortunately in ruins. The Hoysalesvara, though never completed, was praised in the highest terms by Fergusson, as a foremost example of Hindu architecture. There are also some striking Jain *bastis*, but these are not decorated with the lavish sculpture of the other temples. Traces of different parts of the old city are still pointed out.

Hassan Town.—Head-quarters of the District and *tāluk* of Hassan, Mysore, situated in 13° 0′ N. and 76° 6′ E., 25 miles from Arsikere railway station. Population (1901), 8,241. The original town is said to have been founded in the eleventh century at Chennapatna (on the south) by an officer under the Cholas, whose descendants held it till the end of the twelfth century. There being no heir, the Hoysala kings then conferred it on another chief, by whom the present town and fort were built. It formed part of the Belūr kingdom under Vijayanagar, and was annexed to Mysore in 1690. The municipality dates from 1873. The receipts and expenditure during

the ten years ending 1901 averaged Rs. 12,000. In 1·
they were Rs. 17,000.

Hole-Narsipur Town.—Head-quarters of the *tāluk* c
same name in Hassan District, Mysore, situated in 12° 4
and 76° 14′ E., on the Hemāvati river, 21 miles sout
of Hassan. Population (1901), 6,256. The fort was bu
1168 by a chief who also owned Channarāyapatna. I
taken by the ruler of Mysore in 1667. It contains the
of the *gurū* of the Uttarādi branch of Mādhva Brāhı
Cloth of good quality and gunny-bags are made. The m
pality dates from 1873. The receipts and expenditure d
the ten years ending 1901 averaged Rs. 3,000 and Rs. 3
In 1903–4 they were Rs. 3,800 and Rs. 4,800.

Sathalli.—Village in the Hassan *tāluk* of Hassan Dis
Mysore, situated 10 miles south-west of Hassan town. I
lation (1901), 105. It is of interest as the centre
Christian agricultural community, which had its origin ir
labours of the well-known Abbé Dubois. There is a grou
twelve villages, almost entirely inhabited by Christians,
follow their own customs in all matters not concerned
religion.

Sravana Belgola.—Village in the Channarāyapatna *tāl*
Hassan District, Mysore, situated in 12° 51′ N. and 76° 29
8 miles south-east of Channarāyapatna. Population (19
1,926. This is the chief seat of the Jain sect in Sout
India, being the residence of the principal *gurū*. At the
of Vindhyabetta or Indrabetta, 400 feet above the town, st
the colossal statue of Gomata, 57 feet high, surrounded
numerous sacred buildings. On Chandrabetta there are
many temples, and between the two hills a splendid tank
gola). According to the tradition of the Jains, Bhadrabāhu
of the Srutakevali, as the immediate successors of the pers
disciples of Vardhamāna or Mahāvīra are called, died here
cave on Chandrabetta, while leading a migration to the S
from Ujjain, to escape a twelve years' famine which he
predicted. He is said to have been accompanied as his
attendant by the Maurya emperor, Chandra Gupta, who
abdicated the throne and, in accordance with Jain r
adopted the life of a hermit. These events are borne ou
rock inscriptions of great antiquity, though without a
The grandson of Chandra Gupta, it is said, paid a visit to
spot, and the present town arose out of his encampment.
oldest *basti* on the hill is one dedicated to Chandra G
Its façade is sculptured with ninety scenes from the liv

Bhadrabāhu and Chandra Gupta; but these are more modern, dating perhaps from early in the twelfth century. The gigantic statue was erected, according to inscriptions at its foot in Nāgarī, Old Kanarese, Grantha, and Vatteluttu characters, and in the Marāthī, Kanarese, and Tamil languages, by Chāmunda Rāya. He was minister and general to the Ganga king Rāchamalla, and the date of the statue is probably 983. The name of the sculptor may have been Aritto Nemi. The surrounding enclosures were erected, as stated at the foot of the statue, by Ganga Rājā, general of the Hoysala king Vishnuvardhana, their date being 1116. The image is nude and stands erect, facing the north, being visible for many miles round the country. The face is a remarkable one, with a serene expression; the hair is curled in short spiral ringlets all over the head, while the ears are long and large. The figure is treated conventionally, the shoulders being very broad, the arms hanging straight down the sides, with the thumbs turned outwards. The waist is small. From the knee downwards the legs are somewhat dwarfed. The feet are placed on the figure of a lotus. Representations of ant-hills rise on either side, with figures of a creeping plant springing from them, which twines over the thighs and arms. These symbolize the complete spiritual abstraction of a *yati*, absorbed and motionless during his long period of penance. Though by no means elegant, the image is not wanting in majestic and impressive grandeur. 'Nothing grander or more imposing,' says Mr. Fergusson, 'exists anywhere out of Egypt, and even there no known statue surpasses it in height.' It was probably cut out of a rock which projected high above the hill, or the top of the hill itself may have been cut away. The figure has no support above the thighs. The Jain establishment was maintained by successive dynasties, until, in common with others, it was shorn of many of its privileges and emoluments by Tipū Sultān, and is now in a reduced condition. Brass vessels are made in the place, and there is some local trade. The municipality formed in 1893 became a Union in 1904. The receipts and expenditure during the eight years ending 1901 averaged Rs. 470 and Rs. 360. In 1903-4 they were Rs. 500 and Rs. 1,400.

Kadūr District.—District in the west of the State of Mysore, lying between 12° 55′ and 13° 54′ N. and 75° 5′ and 76° 22′ E., with an area of 2,813 square miles. It is bounded on the north by Shimoga District; on the east by Chitaldroog and Tumkūr Districts; on the south by Hassan

Area and boundaries.

District; and on the west by the South Kanara District of Madras.

Physical aspects.

The main part of the District is composed of the most mountainous region within the limits of Mysore. Bordered on the west by the mighty Ghāt range, rising at this part into some of the loftiest peaks between the Himālayas and the Nīlgiris; supporting on its centre the stupendous barrier of the Bābā Budan chain, of even superior elevation; between these towering masses, covered with a complete network of lofty hills whose altitude at certain points, as in the grand Merti peak of Kalasa, renders them conspicuous landmarks even in this region of heights, while ranges of more modest pretensions extend throughout the north and east;—this District, with a slight exception eastwards, may truly be described as pre-eminently the Malnād or 'highland country.' Nor are these mountain tracts wanting in those charms of wood and water which tend to soften the harsher features of so rugged a landscape. For though the summits rear themselves bareheaded into space, the slopes are thickly clad with primaeval forest, through which the shining streams thread their often headlong way, fertilizing the narrow valleys and open glades, till their waters descend to the level of the larger rivers, flowing in steep and sunken channels, whence issue dense mists that cover the face of the country, only lifting as the heat of the morning sun increases in power. In these vast solitudes the habitations of man are few and far between. A single homestead, hidden amid the luxuriance of tropical vegetation, is often the only sign of his presence for many miles around. Roads there used to be none. All the valuable produce of the country was, and to a great extent still is, transported on the backs of cattle, the rallying sounds from the belled leaders of the drove resounding far and wide. The eastern or Maidān *tāluks* partake of the general features of that description of country in the other Districts, the transition from Malnād to Maidān being very abrupt and striking on approaching Lakvalli from the west.

The congeries of mountains, so far as they can be reduced to a system, seem to range themselves into a central ridge running north and south, with a great loop or circle on either hand; while at the south-western angle the Western Ghāts make a bend inwards to the east, marking the initial point of the line which divides the northern from the southern waters of Mysore. The main ridge spoken of above commences at Ballālrāyandurga, and passing east of Mertigudda

and Koppadurga, separates the basin of the Bhadra from that of the Tunga, and runs up towards Mandagadde, connecting with the central range of Shimoga District. On the west of this ridge is the valley in which Sringeri stands, enclosed with a girdle of mountains; while to the east of it, beyond the right bank of the Bhadra, is the Jāgar valley, completely environed with the BĀBĀ BUDAN MOUNTAINS. The highest point in the District, and in Mysore, is Mulainagiri in the Bābā Budans, which rises to 6,317 feet above the sea. In the same group, Bābā-Budan-giri is 6,214 feet, and Kalhattigiri 6,155. The loftiest peak in the Western Ghāts is the Kudremukh or 'horse-face' mountain, so called on account of its appearance from the sea, to which it presents a landmark well-known to navigators on that coast. Its height is 6,215 feet. Of other conspicuous points, the grand Ballālrāyandurga is 4,940 feet, Gangāmūla in the Varāhaparvata 4,781, Woddingudda 5,006, Lakkeparvata 4,662. The superb hill of Kalasa, called the Mertigudda, situated in the heart of the mountain region to the west, is 5,451 feet. Kanchinkaldurga is 4,081 feet, and Sakunagiri 4,653.

The principal rivers are the twin streams, the Tunga and the Bhadra. They both rise at Gangāmūla in the Varāhaparvata in the Western Ghāts. The Tunga flows north-east past Sringeri, and then turns north by west to Shimoga District. The Bhadra runs east past Kalasa, and then with a northeasterly course across the western opening of the Bābā Budan horseshoe, receives the Somavāhini from the Jāgar valley on the east, and passes on to Shimoga District. On the east of the Bābā Budans the Gaurihalla and the Avati are twin streams, rising near Mulainagiri. The first expands into the Ayyankere Lake near Sakkarepatna, and taking the name of Veda runs north-east to Kadūr. The other, the northern stream, forms the large Madaga tank, and the two, uniting near Kadūr town, continue under the name of Vedāvati into Chitaldroog District.

The Shimoga schistose band extends to the southern boundary of the District, and spreads from near Kadūr town to the edge of the Western Ghāts, where it forms much of the high Ghāt country culminating in the Kudremukh. From this point the western boundary is probably continuous up to Anantapur (Shimoga District). At Kudremukh the schistose beds are nearly horizontal, with a slight dip to the north; the scarp on the southern side of the mountain, descending to South Kanara, displays a series of Dhārwār rocks about Geology.

5,000 feet in thickness, composed largely of trap flows, with some beds of micaceous and other schists, and resting unconformably on the denuded surface of the Archaean rocks below. On the eastern side of the band, near Ajjampur, the rocks dip generally to the east. To the south and west of Tarikere large masses of chloritic schists occur, and underlying these to the south is a great thickness of trap flows, forming part of the Santaveri and Bābā Budan mountains. The trap flows are disposed in a very flat anticlinal curve, and to the west are seen to be overlaid by a great thickness of dark schists, with haematite bands and quartzites overlying these again. In the country around Ajjampur and Tarikere masses of conglomerate are developed, consisting chiefly of large boulders and pebbles of granite in a quartz-felspar-chlorite matrix; these pass through various gradations into grits, quartzites, and chloritic schists.

Botany. At the extreme heights of Mulainagiri and Kudremukh the mountains are clothed with grass and herbs, but are generally bare of trees. The plants of the west of Mysore and of Coorg are nearly all found in this alpine District, in addition to such as *Lysimachia deltoides*, *Anemone rivularis*, *Ranunculus diffusus*, *Cinnamomum Wightii*, with other genera and species far too numerous to mention.

Climate and rainfall. At Chikmugalūr, the head-quarters, the mean annual temperature is between 72° and 73°, the daily range being about 20°. The temperature of the Malnād often falls much lower, the cold in the early morning at Christmas time being very sharp. Malarious jungle fevers are always prevalent at certain seasons, and neither Europeans nor natives are exempt from attacks. The average annual rainfall at Chikmugalur is variously stated at from 36 to 42 inches. But the country lying within the Western Ghāts has a far heavier fall. The annual average at Koppa is given as 122 inches, and at Mudgere as 103. At Hariharpur 166 inches fell in 1874; at Mudgere 194 inches in 1882; and at certain coffee estates in that *tāluk* 145 and 156 inches have been received in a year. The fall is heaviest in June, July, and August, there being 43 inches in July alone.

History. The west was from an early period subject to the Kadambas, and the remainder of the District to the Gangas. About the eighth century the Sāntara kingdom was established at Pomburchcha or Humcha in Shimoga District. The Sāntaras extended their rule southwards as far as Kalasa in this District, and at a later period made their capital at Sisila or Sisugalī

at the foot of the Ghāts in Mudgere. Eventually their capital was at Kārkala in South Kanara. At one time they acknowledged the supremacy of the Chālukyas, and were staunch Jains. But under Vijayanagar rule they became Lingāyats, and were known as the Bhairarasa Wodeyars. Meanwhile, the Hoysalas arose at the beginning of the eleventh century, their original seat being Sosevūr, now Angadi in the Mudgere *tāluk*. They were supreme throughout Mysore and beyond from the twelfth to the fourteenth century, when they were overthrown by Musalmān invasions from the North of India. But the Vijayanagar empire was founded in 1336, and its success at first was greatly due to the aid given by the head of the Sringeri *math*, originally established by the reformer Sankarāchārya in the eighth century. In consequence of this aid the capital of the new empire was called Vidyānagara, after Vidyāranya or Mādhava, its first minister, who was also the head of the *math*. Vidyānagara in course of time passed into the form Vijayanagara. After the fall of Vijayanagar, the Keladi chiefs of Bednūr assumed independence, and restored the possessions of the Sringeri *math*. In the seventeenth century Sivappa Naik of Bednūr overran many parts of the District. But he was opposed by Mysore; and in 1694 a treaty was signed between the two powers, by which the latter gained nearly the whole of the District, and Haidar Alī's conquest of Bednūr in 1763 completed its inclusion in Mysore. In the east, Tarikere was the seat of a line of feudatory chiefs driven out of Basavāpatna in Shimoga District by the Bijāpur invasions of the seventeenth century. When, in 1830, a rebellion broke out in the Nagar country, owing to the misrule of the Rājā, the Tarikere chief was one of the first to escape from Mysore and join the rebels. The result was the extinction of this line of chiefs. The opening out of the inaccessible Malnād country in the west by roads at the end of last century has secured the peace of that wild part.

Archaeology. The most important archaeological feature is the Amritesvara temple near Tarikere, erected in the twelfth century, under the Hoysalas. Some interesting Jain temples are represented by the ruins at Sosevūr or Angadi, the place of origin of the Hoysalas, which contain fine specimens of carving. The Vidyāsankara temple at Sringeri is an effective building, in the Dravidian style of Vijayanagar. The inscriptions of the District have been translated and published.

The people. The population at each Census in the last thirty years

was: (1871) 310,176, (1881) 293,822, (1891) 332,025, and (1901) 362,752. The decrease in 1881 was due to the famine of 1876–8. By religion, in 1901 there were 326,960 Hindus, 18,144 Musalmāns, 12,205 Animists, 3,888 Christians, and 1,554 Jains. The density of population is 129 persons per square mile, that for the State being 185. The number of towns is 10, and of villages 1,352.

The following are the principal statistics of population in 1901:—

Tāluk.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Kadūr	571	3	317	80,904	142	+ 12·0	4,068
Chikmugalūr	638	1	235	90,681	142	+ 6·6	5,882
Mudgere	435	1	137	46,212	107	+ 11·7	2,284
Koppa	657	2	168	54,827	83	+ 1·4	3,445
Sringeri *jāgīr*	44	1	259	10,656	244	+ 16·5	1,216
Tarikere	468	2	236	79,472	170	+ 12·5	4,392
District total	2,813	10	1,352	362,752	129	+ 9·1	21,287

NOTE.—In 1902–3 a transfer of 25 square miles was made from the Kadur *tāluk* to Chitaldroog District.

Castes and occupations.

As regards castes, Lingāyats number 70,000; the outcaste Holeyas and Mādigas 56,000 and 13,000; Wokkaligas or cultivators 50,000. Of Brāhmans there are 18,000. Two-thirds of the Musalmāns are Shaikhs, 12,000. Of nomads, Lambānis number 8,600; Koramas, 2,000; and Iruligas, 1,200. By occupation, 70·3 per cent. are engaged in agriculture and pasture, 12·3 per cent. in unskilled labour not agricultural, and 6·9 per cent. in the preparation and supply of material substances.

Christian missions.

There are 3,888 Christians in the District, of whom 3,606 are natives. The Roman Catholics and Wesleyans have stations at Chikmugalūr and visit other parts.

General agricultural conditions.

Along the south of the Bābā Budan mountains is a rich tract of black cotton soil, whose fertility, enhanced by the command of an unfailing supply of water from the hill streams, is said formerly to have given to the plain of Chikmugalūr the name of Honjavanige Sīme, or 'land flowing with gold.' The higher tracts of this region are generally gravelly. Black cotton soil prevails also in the neighbourhood of Ajjampur, together with red and gravelly soils. The western parts of Tarikere contain sandy and gravelly soils. About Yegate the earth seems poor and has a white chalky appearance. Farther

south the soil is adapted to the cultivation of the coco-nut without irrigation, as in the adjoining parts of Tumkūr and Chitaldroog Districts. The soil of the Malnād bears a general resemblance to that of the same region extending through the neighbouring Districts north and south.

Chief agricultural statistics and principal crops.

The following table gives statistics of cultivation for 1903-4:—

Tāluk.	Area in square miles, shown in the revenue accounts.				
	Total.	Cultivated.	Irrigated.	Forests.	Cultivable waste.
Kadūr	536	202	17	1	85
Chikmugalūr	609	144	42	85	22
Mudgere	426	80	35	4	9
Koppa	658	82	51	118	18
Tarikere	460	178	18	57	25
Total	2,689	686	163	265	159

In addition to the ordinary cereals, pulses, and oilseeds, the following crops call for special notice. The areca gardens, which occupy the moist and sheltered valleys throughout the west, produce the best description of nut in the country, that of Kalasa and its neighbourhood being in especially high repute. The coffee cultivation of Southern India had its origin in the District. It was first introduced by Bābā Budan in the seventeenth century on his return from a pilgrimage to Mecca, when he planted a few berries he had brought with him near his hut on the hills that bear his name. But it was not till 1820 that the cultivation extended beyond his garden, and not till twenty years later that European enterprise was first attracted to it. The original plants then put in by Mr. Cannon to the south of Bābā-Budan-giri are still flourishing. Land was soon after taken up for coffee in South Manjarābād, and since 1860 European planters have settled in almost a continuous chain of estates throughout the Malnād. The coffee zone in this District is estimated to cover about 1,000 square miles. The cardamom grows wild in the same parts, but owing to the extension of coffee estates it is no longer plentiful except in the Kalasa and Melbangādi *māganis*. Its systematic cultivation has been taken up in some parts with success. Experiments made with cinchona, tea, cotton, and mulberry have not come to anything. The area occupied by the various crops in 1903-4 was: *rāgi*, 172 square miles; rice, 153; coffee, 123; gram, 42; other food-grains, 67; garden produce, 26; oilseeds, 22.

Agricultural loans. During the twelve years ending 1904 there was advanced for land improvements Rs. 14,500, and for irrigation wells Rs. 7,300.

Irrigation. The area irrigated from channels is 12 square miles, from tanks 54, and from other sources 97. The number of tanks is 4,394, of which 103 are classed as 'major.'

Forests. The west of the District contains some of the best forests in the State. The Lakvalli teak forests have for many years supplied Western Mysore and the Bellary country with that timber. Throughout the Jāgar valley, and most of the Koppa and Mudgere *tāluks*, a continuous stretch of valuable forest densely clothes the hill-sides, giving shelter to much coffee cultivation. The State forests cover an area of 144 square miles, 'reserved' lands 124, and plantations 144. The forest receipts in 1903-4 were Rs. 2,98,000, chiefly from sandalwood.

Mines and quarries. Gold-mining was begun near Ajjampur by the Kadūr-Mysore Company, but owing to the poor prospects has been suspended. Iron ore is largely obtained and smelted along the hills east of the Bābā Budan range, and round Ubrāni. Corundum is found in abundance near Kadūr and throughout the east.

Arts and manufactures. The principal articles manufactured are oils and oil-cake, cotton piece-goods, woollen blankets, and glass bangles. Jaggery is also made, and there is some production of iron. A certain amount of catechu or terra japonica is prepared. There are reported to be 300 looms for cotton, 400 for wool, 87 oil-mills, and 201 jaggery and sugar-mills.

Commerce and trade. The most important exports are coffee, pepper, cardamoms, rice and other food-grains, and oilseeds. It is only a quarter of a century since the Malnād began to be opened up by a network of roads, and only since 1889 that the railway has run through a small part of the District. These agencies are bound to effect considerable changes in trade and the transport of commodities. The principal traffic between the Malnād and Maidān *tāluks* was formerly through five *kanaves* or passes: namely, Talagudde, Talamakki, Birnahalli, Gantevināyakan, and Sitalmallapan.

Means of communication. The Southern Mahratta Railway from Bangalore to Poona runs through the east of the District, with a branch from Birūr north-west to Shimoga, the length of line being altogether 62 miles. Provincial roads have a length of 259 miles, and District fund roads of 403 miles.

Famine. There has been no general famine in the District since that

of 1876–8, but the areca gardens have suffered in periods of drought.

The District is divided into five *tāluks*: Chikmugalūr, Kadūr, Koppa (including Sringeri *jāgīr*), Mudgere, and Tarikere. The following subdivisions were formed in 1903, and placed under Assistant Commissioners: Chikmugalūr and Mudgere; Kadūr, Tarikere, and Koppa, with head-quarters at Chikmugalūr. **Divisions.**

The District court at Shimoga has jurisdiction over the whole of this District, and the Subordinate Judge's court over a part. There is a Subordinate Judge's court at Chikmugalūr for the remaining part, and a Munsif's court at Yedehalli. **Judicial.**

The land revenue and total revenue are shown below, in thousands of rupees:— **Land revenue.**

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	6,92	7,73	8,42	8,11
Total revenue . .	9,13	12,27	14,46	15,55

The revenue survey and settlement were introduced into the east of the District in 1877–8, and into the west in 1880–1. The incidence of land revenue per acre of cultivated area in 1903–4 was Rs. 1–12–10. The average assessment per acre on 'dry' land is R. 0–13–1 (maximum scale Rs. 2–10–0, minimum scale R. 0–0–6); on 'wet' land, Rs. 3–4–0 (maximum scale Rs. 8–8–0, minimum scale R. 0–1–0); on garden land, Rs. 7–4–2 (maximum scale Rs. 18, minimum scale Rs. 1–8–0).

There were eight municipalities in 1903–4—Chikmugalūr, Tarikere, Birūr, Kadūr, Yedehalli, Mudgere, Koppa, and Sringeri—with a total income of Rs. 57,000 and an expenditure of Rs. 66,000. There were also two village Unions, Ajjampur and Sakkarepatna, whose income and expenditure were Rs. 2,000 and Rs. 7,000. The District and *tāluk* boards had an income of Rs. 50,000 in 1903–4, chiefly derived from a share of the Local fund cess, and spent Rs. 49,000, including Rs. 33,000 on roads and buildings. **Local boards.**

The strength of the police force in 1903–4 was one superior officer, 60 subordinate officers, and 381 constables. There were 7 lock-ups, containing a daily average of 16 prisoners. **Police and jails.**

In 1901 the percentage of literate persons was 5·9 (10·5 males, 0·6 females). The number of schools increased from 201 with 5,130 pupils in 1890–1 to 292 with 7,324 **Education.**

pupils in 1900–1. In 1903–4 there were 207 schools (95 public and 112 private) with 4,936 pupils, of whom 692 were girls.

Medical. Besides the civil hospital at Chikmugalūr, there are 14 dispensaries, in which 111,882 patients were treated in 1904, of whom 700 were in-patients, the number of beds available being 36 for men and 22 for women. The total expenditure was Rs. 33,000.

Vaccination. The number of persons vaccinated in 1904 was 4,723, or 13 per 1,000 of the population.

Kadūr Tāluk.—Eastern *tāluk* of Kadūr District, Mysore, lying between 13° 19′ and 13° 50′ N. and 75° 51′ and 76° 22′ E., with an area of 571 square miles. The population in 1901 was 80,904, compared with 72,217 in 1891. The *tāluk* contains three towns, BIRŪR (population, 5,701), Kadūr (3,881), the head-quarters, and SAKKAREPATNA (1,884); and 317 villages. An area of 25 square miles was transferred to Chitaldroog District in 1902–3. The land revenue demand in 1903–4 was Rs. 1,75,000. On the west lies the complicated mass of hills (Sakunagiri, 4,653 feet) east of the Bābā Budans, and on the east the Garudangiri (3,680 feet) group. The Vedāvati river runs through the middle in a north-easterly direction. It is formed by the junction of the Veda and Avati, which rise in the Bābā Budans, the former supplying the Ayyankere, and the latter the Madagakere, the two largest tanks in this part of the country. Numerous channels are taken off from dams across these streams, forming an irrigated tract of great fertility. The annual rainfall averages 22 inches. Most of the *tāluk* is a slightly undulating plain. The waste lands are covered with wild date or *babūl* trees, and a considerable area is reserved for grazing, supporting a large number of cattle and sheep. Superior tobacco is grown in the south and west. Coco-nuts are grown without irrigation in low sandy soils. Iron ore is obtained from Hogaribetta in the north-west.

Chikmugalūr Tāluk.—Central *tāluk* of Kadūr District, Mysore, lying between 13° 11′ and 13° 34′ N. and 75° 29′ and 76° 1′ E., with an area of 638 square miles. The population in 1901 was 90,681, compared with 77,630 in 1891. The *tāluk* contains one town, CHIKMUGALŪR (population, 9,515), the head-quarters, and 235 villages. The land revenue demand in 1903–4 was Rs. 2,13,000. The north is occupied by the lofty forest-clad circle of the BĀBĀ BUDAN MOUNTAINS (highest peak, Mulainagiri, 6,317 feet), enclosing the Jāgar valley. The Bhadra, flowing north, forms most of the western boun-

dary. The annual rainfall averages 36 inches. Around Chikmugalūr is an elevated tract of rich black soil, watered by perennial streams from the Bābā Budans, the principal being the Yagachi, which runs south-east. Its fertility was such that it was called Honjavanige or 'flowing with gold.' It is bare of trees, but produces unfailing crops of wheat, Bengal gram, sugar-cane, rice, coriander, fenugreek, garlic, onions, and safflower. The west of the *tāluk* is Malnād. There are many coffee plantations on the slopes of the Bābā Budans.

Mudgere.—Southern *tāluk* of Kadūr District, Mysore, lying between 12° 55′ and 13° 19′ N. and 75° 10′ and 75° 45′ E., with an area of 435 square miles. The population in 1901 was 46,212, compared with 45,521 in 1891. The *tāluk* contains one town, Mudgere (population, 1,675), the head-quarters, and 137 villages. The land revenue demand in 1903–4 was Rs. 1,23,000. Till 1876 this *tāluk* was a part of MANJARĀBĀD. Like that it lies in the Malnād, and is highly picturesque. The Western Ghāts bound it on the west, towering up to the great peak of Kudremukh (6,215 feet). The Bhadra flows across the north, and the Hemāvati through the south. The summits of the mountains are bare, but the hanging woods on their sides impart great beauty to the landscape. The annual rainfall averages 103 inches. The chief products are coffee, areca-nuts, cardamoms, rice, and a little sugar-cane. The rice crop mainly depends on springs in the hills from which watercourses are led. Many of the coffee estates are under European management, the labourers being Tulus from South Kanara. The Bûnd (or coffee) *ghāt* road runs from Mudgere west, down to Mangalore on the coast.

Koppa.—Western *tāluk* of Kadūr District, Mysore, including the Yedehalli sub-*tāluk* and the Sringeri *jāgīr*, and lying between 13° 15′ and 13° 46′ N. and 75° 5′ and 75° 45′ E., with an area of 701 square miles. The population in 1901 was 65,483, compared with 62,343 in 1891. The *tāluk* contains three towns, SRINGERI (population, 2,430), Yedehalli (2,266), and Koppa (1,018), the head-quarters; and 427 villages. The land revenue demand in 1903–4 was Rs. 1,85,000. Koppa is bounded on the west by the Western Ghāts. The Tunga flows through the west, and the Bhadra forms the eastern boundary. The whole is purely Malnād, full of grand and picturesque scenery. It is a network of lofty hills and sunken valleys, the former densely covered with forests, which shelter a continuous belt of coffee plantations, formed by Europeans in the last thirty years, the latter

occupied by steeply terraced rice flats and areca gardens. The annual rainfall averages 120 inches. The most open part is the Sringeri valley. Cardamoms are valuable products on the Ghāts. There is not much 'dry' cultivation. Rice is the staple 'wet' crop, nourished by the rainfall, and sugar-cane is much grown around Dānivāsa in the north-east. Conspicuous among the mountains is the superb Merti peak (5,451 feet). The Sringeri *math*, founded in the eighth century by Sankarāchārya, lies in the west, and is the chief seat of the Smārta Brāhmans. At Bālehalli in the east is one of the chief *maths* of the Lingāyats.

Sringeri.—A *jāgīr* in the west of the Koppa *tāluk* of Kadūr District, Mysore, lying between 13° 22′ and 13° 28′ N. and 75° 17′ and 75° 23′ E., with an area of 44 square miles. Population (1901), 10,656. The *jāgīr* contains one town and 259 villages. The Tunga river runs through it from south-west to north-east, and the country is pure Malnād or high-land. The annual rainfall averages 150 inches. Sringeri town is situated in 13° 25′ N. and 75° 19′ E., on the Tunga, 15 miles from Koppa. Population (1901), 2,430. The dominant institution of the place is the *math* established by the great Hindu reformer Sankarāchārya in the eighth century, which is the seat of the Jagad Gurū, the high-priest of the Smārta Brāhmans. Mādhava or Vidyāranya, the head of the *math* at that time, was instrumental in founding the Vijayanagar empire in 1336, and was its first minister. Sringeri (Sringa-giri, or Rishya-Sringa-giri) is said to have been the place where the Rishi Vibhāndaka performed penance, and where Rishya Sringa, a celebrated character of the Rāmāyana, was born, who grew up to man's estate without having ever seen a woman. He was allured away to the North, and eventually became the priest of Dasaratha, and performed the great sacrifice which resulted in the birth of Rāma. According to an inscription, the tract was granted as an endowment of the *math*, by Harihara, the first king of Vijayanagar, in 1346. Venkatappa Naik of KELADI claims in inscriptions to have rescued the *jāgīr* out of unlawful hands and restored it to the *math* in 1621. The revenue is estimated at Rs. 50,000 a year, which is supplemented by Rs. 12,000 from the Mysore State. A municipality was established in 1888. The receipts and expenditure during the ten years ending 1901 averaged Rs. 2,400. In 1903–4 the receipts rose to Rs. 11,000, and the expenditure to Rs. 10,000.

Tarikere Tāluk.—Northern *tāluk* of Kadūr District, Mysore State, lying between 13° 30′ and 13° 54′ N. and 75° 35′ and 76° 9′ E., with an area of 468 square miles. The population in 1901 was 79,472, compared with 72,352 in 1891. The *tāluk* contains two towns, TARIKERE (population, 10,164), the head-quarters, and Ajjampur (2,164); and 236 villages. The land revenue demand in 1903–4 was Rs. 1,38,000. The Bābā Budan range enters the south-west, its slopes being covered with heavy forest, partially cleared for coffee plantations. Along the north are the Ubrāni hills, at one time covered with thick bamboo jungle. The annual rainfall averages 31 inches. Black cotton soil prevails in the east, which is bare of trees, but yields fine crops of wheat, cotton, Bengal gram, great millet, &c. On the red soil of other parts *rāgi* and pulses are grown. Iron ore is worked in the Ubrāni hills, and at Lingadahalli at the western foot of the Bābā Budans. Near Ajjampur are old gold-workings, and mining has been recently revived in the Kadūr-Mysore mines, under European management, but so far without much success.

Angadi.—Village in the Mudgere *tāluk* of Kadūr District, Mysore, 7 miles south of Mudgere town. Population (1901), 535. It is of interest as being the Sosevūr, Sasipura, or Sasikapura from which the Hoysala kings originally came, and which was the scene of the incident with the tiger from which they derive their origin and name. It contains several remarkable ruined temples, and also some beautiful sculpture in what remains of two Jain *bastis*. But the principal deity now worshipped is Vasantamma, who has a great local reputation, and is probably the original Vāsantikā Devī of the Hoysalas.

Asandi.—Village in the Kadūr *tāluk* of Kadūr District, Mysore, situated in 13° 42′ N. and 76° 6′ E., 5 miles from Ajjampur railway station. Population (1901), 1,006. In ancient times it was a place of considerable importance. Under the Gangas and the Hoysalas it was the chief city of a principality, which in the eighth century was governed by Vijayāditya, son of the king Srīpurusha, and in the twelfth and thirteenth centuries by a line of Ganga chiefs.

Bāle-Honnūr.—Town (or rather group of villages) in the Koppa *tāluk* of Kadūr District, Mysore, situated in 13° 22′ N. and 75° 27′ E., on the Bhadra river. Population, with associated villages (1901), 1,081. A fine bridge has recently been built across the river, which always had a ford at this

point. To the north is the Bālehalli *math*, the seat of one of the principal *gurūs* of the Lingāyat sect.

Ballālrāyandurga.—Fortified hill in the Western Ghāts, 4,940 feet high, in the south-west of Kadūr District, Mysore, situated in 13° 8′ N. and 75° 25′ E. It was a stronghold of the Hoysala kings in the twelfth century. Hither the queen of Bednūr fled for refuge when her capital was taken by Haidar Alī in 1763, and here she was captured and sent as a prisoner to Maddagiridurga.

Birūr.—Town in the Kadūr *tāluk* of Kadūr District, Mysore, situated in 13° 36′ N. and 75° 58′ E., at the junction for the Shimoga branch railway. Population (1901), 5,701. Areca-nuts from the Malnād in the west are exported to Bellary and Dhārwār. A very large trade is carried on in coco-nuts, grain, and other produce of the surrounding country. The town has been extended in recent years. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 4,700 and Rs. 4,400. In 1903-4 they were Rs. 4,000 and Rs. 6,500.

Chikmugalūr Town.—Head-quarters of the *tāluk* of the same name in Kadūr District, Mysore, situated in 13° 19′ N. and 75° 46′ E., 25 miles south-west of Kadūr railway station. Population (1901), 9,515. It stands in the fertile valley of black soil south of the Bābā Budan range, and has increased enormously since the removal hither of the District head-quarters from Kadūr in 1865. The fort was in existence in the ninth century under the Ganga kings, and then passed to the Hoysalas. The modern town, extending from the fort to Basavanhalli, which it includes, was established in 1865; and a number of Muhammadan traders and shopkeepers have settled here, who supply the wants of the coffee plantations to the west. The water-supply is drawn from a tank at the foot of the Bābā Budans. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 30,000 and Rs. 29,000. In 1903–4 they were Rs. 22,000 and Rs. 31,000.

Hiremugalūr.—Village in the Chikmugalūr *tāluk* of Kadūr District, Mysore, situated in 13° 18′ N. and 75° 48′ E., a mile from Chikmugalūr town. Population (1901), 2,392. Its Purānic name is Bhārgavapuri, and here the emperor Janamejaya is said to have performed the *sarpa-yāga* or 'serpent sacrifice,' to revenge the death of his father Parikshit from the bite of a serpent. A spear-headed stone pillar is shown as the *yūpa-stambha* or 'sacrificial post' used at the ceremony. Any

one bitten by a snake will be cured by going round it and bathing in the pond close by. The village is surrounded by rich black soil. Inscriptions show that it was an *agrahāra* under the Gangas in the ninth century, and under the Hoysalas in the eleventh. It contains a temple to Parasu, the axe of Parasu Rāma.

Kalasa.—Village in the Mudgere *tāluk* of Kadūr District, Mysore, situated in 13° 14′ N. and 75° 22′ E., on the Bhadra river, 24 miles north-west of Mudgere town. The village lies in a valley, surrounded by lofty hills, to the south of Merti-parvat, also known as the Kalasa hill. There is a large temple of Kalasesvara, containing thirteenth-century copper grants by Jain queens, and surrounded by fifteenth and sixteenth-century stone inscriptions of the Bhairarasa Wodeyar rulers of Kārkala under Vijayanagar. It was probably a Jain temple originally. Mounds covering ruins of a large town lie on all sides. The original Sāntara kingdom of Pomburchcha extended into the kingdom of Kalasa above the Ghāts and Kārkala below the Ghāts. Kalasa is called a 'three thousand' kingdom. In the seventeenth century it was absorbed into the Keladi territory. In a sacred bathing-place on the river, called Ambā-tīrtha, is a large square boulder, placed horizontally on another, and bearing an inscription that it was brought and placed there with one hand by Madhvāchārya. This was the founder of the Mādhva sect of Brāhmans, who lived from 1238 to 1317. The areca-nuts produced in the neighbourhood are reckoned the best in Mysore.

Kudremukh ('Horse-face').—Conspicuous peak in the Western Ghāts, 6,215 feet high, situated in 13° 8′ N. and 75° 16′ E., on the borders of the Kadūr District of Mysore and the South Kanara District of Madras. Its name is descriptive of its appearance seawards, where it is a well-known mark for navigators. The approach from the Mysore side is by way of Samse, and the hill is sometimes called the Samse-parvat. The officials of South Kanara have a bungalow at the top as a hot-season retreat, and the bridle-path from that side is the easiest means of ascending the mountain.

Lakvalli.—Village in the Tarikere *tāluk* of Kadūr District, Mysore, situated in 13° 42′ N. and 75° 38′ E., on the Bhadra river, 13 miles from Tarikere railway station. Population (1901), 1,196. West of it are vast forests on each side of the Bhadra, containing some of the most valuable teak timber in the country. Close by is the site of Ratnapuri, the ancient capital of Vajra Makuta Rāya. Subsequently included in the

Humcha and Ganga territories, it afterwards formed part of the Hoysala and Vijayanagar kingdoms. The chiefs of Tarikere acquired it later, but were forced to yield it to Bednūr, the conquest of which by Haidar Alī in 1763 led to the absorption of the country into Mysore.

Mertiparvat (or Mertigudda).—Mountain peak, 5,451 feet high, in the south-west of Kadūr District, Mysore, situated in 13° 18′ N. and 75° 23′ E. To the north it presents a majestic conical aspect. Towards the south-west it is connected with two lower heights, and is so surrounded on all sides with high hills that its true elevation does not appear except at a distance. The top is bare, but the sides are clothed with fine forests, and where the ground admits, terraced for paddy-fields. It is also called the Kalasa hill, being near to that place.

Sakkarepatna.—Town in the Kadūr *tāluk* of Kadūr District, Mysore, situated in 13° 26′ N. and 75° 55′ E., 11 miles south-west of Kadūr railway station. Population (1901), 1,884. This is said to have been in old times the capital of Rukmāngada, a king mentioned in the Mahābhārata. It contains a monument to Honbilla, who was sacrificed to secure the stability of the Ayyankere reservoir, and also a great gun, and an immense slab of stone, about 12 feet square and several inches thick, supported on four pillars. The last is called Vīra Ballāla Chauki, and is said to have been the royal seat of justice. Under the Vijayanagar kingdom, the place belonged to the Belūr chiefs. It was next taken by the Bednūr rulers, and Sivappa Naik of that family conferred it on the king of Vijayanagar, who had fled to him for refuge. But in 1690 it was taken by the Rājā of Mysore, and retained by him under the treaty of 1694. The municipality, formed in 1895, became a Union in 1904. The receipts and expenditure during the six years ending 1901 averaged Rs. 1,700 and Rs. 1,200. In 1903–4 they were Rs. 1,500 and Rs. 5,200.

Tarikere Town.—Head-quarters of the *tāluk* of the same name in Kadūr District, Mysore, situated in 13° 43′ N. and 75° 49′ E., on the Shimoga branch of the Mysore State Railway. Population (1901), 10,164. The old town was at Kātūr, to the north-west, and was founded at the end of the twelfth century by the Hoysalas. The descendants of the chief on whom it was bestowed fortified Kāmandurga on the Bābā Budans. The place was captured by the king of Vijayanagar in the fourteenth century, and given to one of his

generals. From this family it was taken by the Sultān of Bijāpur. The Kātūr territory was next given by the Mughals to the chief of Basavāpatna, who built the town and fort of Tarikere in 1659. The Tarikere *poligārs* continued in power till subdued by Haidar Alī in 1761. The head of the family escaped from Mysore in 1830, and took a leading part in the rebellion which then broke out. His son continued at large, creating disturbances, till 1834, when he was caught and hanged. The town has considerably increased since the construction of the railway in 1899. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 8,800 and Rs. 7,800. In 1903–4 they were Rs. 11,000 and Rs. 9,000.

Vastāra.—Village in the Chikmugalūr *tāluk* of Kadūr District, Mysore, situated in 13° 16′ N. and 75° 43′ E., 6 miles from Chikmugalūr town. Population (1901), 898. It stands at the entrance to the Malnād. The name is said to be derived from *vasu-dara*, 'land bestowed as an endowment.' The village was founded by Sāntarasa, one of the kings of Humcha. The Pāndya kings of Sisugali, and the Bhairarasa Wodeyars of Kārkala subsequently held it, and then the chiefs of Belūr and Bednūr. It was taken by the Mysore forces in 1690, but restored to Bednūr by the treaty of 1694. The conquest of Bednūr by Haidar Alī in 1763 resulted in its annexation to Mysore.

Shimoga District.—District in the north-west of the State of Mysore, lying between 13° 27′ and 14° 39′ N. and 74° 38′ and 76° 4′ E., with an area of 4,025 square miles. It is bounded on the north by the Dhārwār District of Bombay; on the east by Chitaldroog; on the south by Kadūr; and on the west by South and North Kanara Districts. Area and boundaries.

The greater part of the District is Malnād ('hill country'), which includes the whole area west of a line drawn from Shikārpur to Gājanur; the east being Maidān or Bayal-sīme ('plain country'). The first is a region of tropical forests and mountain wilds. Trees of the largest size stand thickly together in miles of unbroken ranks, their giant trunks entwined with python-like creepers, their massive arms decked with a thousand bright blossoming orchids. Birds of rare plumage flit from bough to bough. From the thick woods, which abruptly terminate on verdant swards, bison issue forth at dawn and afternoon to browse on the rich herbage, while large herds of *sāmbar* pass rapidly across the hill-sides. Packs of wild dogs cross the path, hunting in company, and the warning boom of Physical aspects.

the great *langūr* monkey is heard from the lofty trees. The bamboo forest has beauties of its own. The elegant areca-palms of Nagar; the *kāns* of Sorab, with the rich hues of wild cinnamon and the sombre green of the jack, intermingled with the truncated leaf of the *bagni*-palm, and the waving branches of the pepper-vine; the magnificent avenues of the *dhūpa*-tree in Sāgar—all unite to vary the attractions of this region of natural beauty. The view from the head of the descent to the Gersoppa Falls is probably one of the choicest bits of scenery in the world. The features of the open country are tame in comparison with those of the woodland tracts, but there is much that is picturesque in the fertile *tāluk* of Channagiri, with its splendid Sūlekere tank.

The main part of the District consists of the western slopes of the upper Tungabhadra valley. This river is formed by the union at Kūdali in the Shimoga *tāluk* of the twin streams Tunga and Bhadra, of which the former runs for most of its course within this District, in a north-easterly direction. From the point of confluence the united river runs north to the frontier. The Sharāvati rises near Kavaledurga in the south-west, and runs north-west to the frontier, where it turns west and hurls itself down the Ghāts in the Jog or far-famed GERSOPPA FALLS, a sheer descent of 830 feet. The streams between Kodachādri and Kavaledurga flow west or south-west into Kanara. The west of the District, resting upon the Ghāts, is very mountainous, the highest point being the peak of Kodachādri, 4,411 feet above the sea. Govardhangiri and Chandragutti are also conspicuous hills, the latter rising to 2,794 feet. A chain of hills runs from Mandagadde on the Tunga north by Anantapur towards Sorab, with a ridge west from Atavadi to Talguppa. On the east are two lines of low stony hills stretching from the south of Channagiri to the frontier, one following the course of the Tungabhadra northwards, the other crossing the river near Holehonnūr and passing near Shikārpur. The south-west around Nagar and Kavaledurga is full of hills.

Geology.

The Shimoga schist band is a southern continuation of that on which the town of Dhārwār is situated. Crossing the Tungabhadra near Harihar, it extends southwards into Kadūr District. Its western boundary is probably continuous from Anantapur to the Kudremukh. West from Anantapur to Talguppa the country is covered by a great spread of laterite, beneath which gneiss is exposed in deep nullahs. In places the laterite is over 100 feet in thickness. It is quarried in

square blocks, which form the most common building material, being used not only for dwelling-houses, but for bridges and other public structures. Broken up it forms metal for roads.

Botany.

Magnificent evergreen forest covers the west, many of the hills being heavily wooded up to their summits. On all sides trunks with clear stems of from 80 to 100 feet to the first branch meet the eye. The more valuable kinds are poon (*Calophyllum tomentosum*), wild jack, ebony, *some* (*Soymida febrifuga*), *heigni* (*Hopea Wightiana*), *eruol*, *dhūpa* (*Vateria indica*), the large *devadāram* (*Erythroxylon*), gamboge, and a species of cedar. Farther east is a rich belt, in which the more important trees are teak, black-wood, *honne* (*Pterocarpus Marsupium*), *matti* (*Terminalia tomentosa*), *sampagi* (*Michelia Champaca*), *arsentega* (*Adina cordifolia*), *alale* (*Terminalia Chebula*), *bāgi* (*Albizzia Lebbek*), *dindiga* (*Anogeissus latifolia*), and others. Sorab abounds with *kāns*, apparently the remains of old forests. Many are cultivated with pepper-vines, and sometimes coffee. The sago-palm (*Caryota urens*) is also grown for the sake of its toddy. From Mandagadde a long stretch of wooded country runs north, in which are found good teak, and much second-class timber, with a large quantity of *Inga xylocarpa*, used for making charcoal for the iron mines.

Climate and rainfall.

The rainfall rapidly diminishes eastwards from the Ghāt region. Thus, while the annual fall at Nagar averages about 190 inches, and at Tīrthahalli 114, at Sāgar 70, and at Sorab 57, it is only about 35 at Shimoga and 25 at Channagiri. For about 25 miles from the Ghāts the south-west monsoon is felt in full force. At Shimoga town, which is 40 miles distant, it often produces nothing more than driving clouds, with occasional drizzle and a few days of moderately heavy rain. East of the Tungabhadra the wind blows with much force, but the clouds rarely break. The heaviest rains on this side are in May and October, and come in thunderstorms from the eastward. The mean temperature at Shimoga town may be stated as ranging from 55° to 87°. The sea-breeze relieves the heat in the hot season, and is distinctly felt at Shimoga.

History.

The Mauryas are said in inscriptions to have ruled over Kuntala, which included some parts of the District. A Chandra Gupta is described as having ruled Nāgarakhanda (the Shikārpur *tāluk*). Asoka sent a Buddhist missionary to Banavāsi, on the north-west frontier, in the third century B.C. The next record is of the Sātavāhanas, containing a grant by Sātakarni at Malavalli in the Shikārpur *tāluk*, probably of the

second century A. D. They were followed by the whose capital was Banavāsi, but their place of Sthānakundūr (Tālagunda in the Shikārpur *tāluk*) interesting story of their rise is recorded on a pi progenitor, who was a Brāhman, went to the Pal Kānchi (Conjeeveram) in order to complete his Ve While there, he had a violent quarrel with Pallava and in order to be revenged adopted the life of a Perfecting himself in the use of arms, he overcame guards, and established himself in the inaccessible Srīparvata (Kurnool District), where he became s that he levied tribute from the great Bāna and o The Pallavas tried to put him down, but he defeat various ways, till they were compelled to make peac and recognize him as king of the Kadamba territo events must be assigned to the second or thir Among his successors, Kākustha gave his daughter i to the Gupta king, perhaps Samudra Gupta, whose to the South in the fourth century is recorded on th the fort at Allahābād.

While the Kadambas were ruling in the west of th the Gangas were established in the east. The sto rise is recorded in inscriptions at Humcha and nea In the fourth century the Ganga king married the king's sister. In the fifth century the Chālukyas north had subdued the whole of Kuntala, and ma (Bādāmi in Bijāpur District) their capital. They have subjected the Kadambas in the sixth centur seventh century they separated into two families, the Western Chālukyas continued to rule from Shimoga District was formed into the Banavas thousand'[1] province, with its seat of government a (Shikārpur *tāluk*). But in the eighth century they come by the Rāshtrakūtas, and did not regain sup 200 years. The Rāshtrakūtas had their capital at M (Mālkhed in the Nizām's Dominions). They first imprisoned the Ganga king, appointing their own govern his territories. But eventually they reinstate entered into alliance with the Gangas. Intermar took place between the two families; and in the ten in return for their help in defeating the Cholas, the

[1] These numerical designations, almost invariably attached of ancient divisions in Mysore, apparently refer to their reve or to the number of their *nāds*.

'twelve thousand' and other provinces were again added to the Ganga kingdom by the Rāshtrakūtas. Meanwhile, in the seventh or eighth century, a Jain principality was established at Pomburchchha or Hombucha (Humcha) by Jinadatta, a prince of the Ugra family and Solar race from Muttra. His line assumed the name of Sāntara; and bringing under their control all the country as far as Kalasa (Kadūr District), they descended the Ghāts to Sisila or Sisukali, and finally established their capital at Kārkala (South Kanara), appointing lieutenants at Bārkūr, Bangādi, Mūdu-Bidare, and Mulki. The territories thus acquired yielded a revenue of 9 lakhs of pagodas above and 9 lakhs below the Ghāts. In course of time the kings became Lingāyats, and under the name of Bhairarasa Wodeyars continued in power down to the sixteenth century, being subordinate in turn to the Chālukyas, Hoysalas, and Vijayanagar, till their territories were subdued by the Keladi chiefs.

In 973 the Rāshtrakūtas were overthrown, and the Chālukyas regained their ascendancy. Their capital was now established at Kalyāni. The Banavase 'twelve thousand' was one of the most important provinces of their empire. But in 1155 the Chālukyas were supplanted by their minister Bijjala, of the Kalachuri family. In his reign the Lingāyat religion, which prevails throughout the Kannada and Telugu countries, was founded by Basava, who was his minister, and who gave his sister to the king in marriage. But the dynasty lasted for only three generations, till 1183. By this time the Hoysalas of Dorasamudra (Halebīd in Hassan District) had subdued the whole of Mysore, and Banavase was one of their provinces. They pushed on to the Kistna, and thus came into collision with the Seunas, or Yādavas of Deogiri (Daulatābād). The latter made some head in the thirteenth century, and established themselves in parts of the north of the country. But in the next century, both Seunas and Hoysalas fell victims to the Musalmān invasions from Delhi. The Vijayanagar kingdom then arose, which ultimately ruled over all the countries south of the Kistna. Under it, in the sixteenth century, were established the line of the Keladi, Ikkeri, or Bednūr chiefs in the west of the District, and of the Basavāpatna or Tarikere chiefs in the east. The Keladi chiefs were Lingāyats; and their founder Sadāsiva Rāya Naik, who took his name from his overlord, first received the government of Bārkūr, Mangalore, and Chandragutti. His successor removed the capital to Ikkeri. After the fall of Vijayanagar, Venkatappa Naik (whom

the Portuguese called Venkapor, king of Kanara) assumed independence, and in the next reign the capital was finally removed to Bednūr (now Nagar). Sivappa Naik, who came to the throne in 1645, overran all the country east to Shimoga, south to Manjarābād, and west throughout the whole of Kanara. The fugitive king of Vijayanagar, who came to him for protection, was established by him at Belūr and Sakkarepatna, and he even attempted to besiege Seringapatam on his behalf. Sivappa Naik died in 1660, and his successors held the country till 1763, when Haidar Alī captured Bednūr, and brought their power to an end. Haidar formed the design of making here a new capital for himself, and gave it the name of Haidarnagar, the present Nagar. The Basavāpatna chiefs were driven from their seat by the Bijāpur invasions, and retired first to Sante-Bennūr, and finally to Tarikere (Kadūr District). In 1783, in the war between the British and Mysore, a force from Bombay captured Bednūr, but it was recovered by Tipū Sultān. After the fall of Seringapatam in 1799, a Marāthā chief named Dhundia Wahag ravaged Shimoga and the east, but was pursued and slain by a force under Colonel Wellesley (the future Duke of Wellington). In 1830 a rebellion broke out in the Nagar country, owing to the Rājā's misrule, and the Tarikere chief escaped from Mysore to join the insurgents. When the insurrection had been put down, the Mysore State was placed under a British Commission, which continued to govern the country till the rendition in 1881.

Archaeology. The Shikārpur *tāluk* is full of antiquities. The Sātakarni inscription at Malavalli, perhaps of the second century, is the oldest, and on the same pillar, in the same Prākrit language, is a Kadamba inscription. But the remains at Belgāmi, the former capital of this Banavase province, throw all the others into the shade. They include many ruined temples remarkable for their carving, and numerous inscriptions, mostly of the eleventh and twelfth centuries. The fine Bherundesvara pillar is an elegant monolith, $30\frac{1}{2}$ feet high and $1\frac{1}{2}$ thick, with a double-headed eagle of human form, 4 feet high, at the top, called Gandabherunda. At Bandanikke, the chief city of Nāgarakhanda, are also richly carved temples, all in ruins. At Humcha are the remains of what must have been splendid Jain temples, and at Ikkeri is a fine Aghoresvara temple. The latter is Dravidian, but the others are Chālukyan in style. The inscriptions of the District have been translated and published.

The people. The population at each Census in the last thirty years was :

(1871) 507,856, (1881) 507,424, (1891) 528,996, and (1901) 531,736. The decline in the first decade was due to the famine of 1876–8. By religion, in 1901 there were 468,435 Hindus, 32,593 Musalmāns, 9,506 Animists, 3,523 Jains, and 1,967 Christians. The density is 132 persons per square mile, that for the State being 185. The number of towns is 14, and of villages 2,017. The largest place is SHIMOGA, the head-quarters, with a population of 6,240 in 1901, reduced from 11,340 in 1891 owing to plague.

The following table gives the principal statistics of population in 1901:—

Tāluk.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Shimoga	687	4	401	91,639	133	−2·8	5,390
Sāgar	666	1	245	56,818	85	−3·7	3,792
Sorab	443	1	307	71,493	161	+2·1	3,379
Shikārpur	429	2	202	63,604	146	−1·2	2,698
Honnāli	331	2	165	68,721	208	+8·2	3,389
Channagiri	465	1	244	81,453	175	+8·3	3,374
Tīrthahalli	476	1	248	57,553	121	−2·8	4,060
Nagar	528	2	205	40,455	77	−5·6	1,836
District total	4,025	14	2,017	531,736	132	+0·6	27,918

Castes and occupations.

Among castes, Lingāyats preponderate, numbering 119,000; Wokkaligas or cultivators number 90,000; the outcaste Holeyas and Mādigas, 31,000 and 22,000; Kurubas or shepherds, 24,000; Bedas, 23,000. The number of Brāhmans is 26,000. Of Musalmān sects the Shaikhs form three-fourths, being 24,000 in number. Among the nomad tribes Lambānis number 17,000; Iruligas, 4,000; and Koramas, 3,800. By occupation, 72·5 per cent. are engaged in agriculture and pasture, 10·9 per cent. in unskilled labour not agricultural, 7·2 per cent. in the preparation and supply of material substances, and 2·8 per cent. in the State service.

Christian missions.

Christians number 1,967, of whom 1,897 are natives. The Roman Catholic and Wesleyan Missions are located at Shimoga, and visit various out-stations.

General agricultural conditions.

The general substratum of laterite in the western *tāluks*, wherever it approaches the surface, checks vegetation. The soil in the rice valleys, characteristic of the Malnād, is loose and sandy, while that of garden lands is stiff and clayey. The richest soil is in the north-east, from the Sūlekere northwards.

The black soil prevails here, and also around Nyāmti and Belgutti in the Honnāli *tāluk*.

Chief agricultural statistics and principal crops.

The following table gives statistics of cultivation for 1903–4:—

Tāluk.	Area in square miles, shown in the revenue accounts.				
	Total.	Cultivated.	Irrigated.	Forests.	Cultivable waste.
Shimoga	617	166	65	159	36
Sāgar	666	68	67	121	43
Sorab	427	98	88	28	28
Shikārpur	403	101	68	103	41
Honnāli	318	186	6	8	18
Channagiri	464	221	15	36	41
Tīrthahalli	473	67	65	4	14
Nagar	525	54	52	34	28
Total	3,893	961	426	493	249

Rice is the principal crop. Areca-nut is extensively grown in the Nagar, Sāgar, and Tīrthahalli *tāluks*, that of the first-named place being considered superior to any in the State. Sugar-cane is largely raised in Shikārpur. Honnāli chiefly produces different kinds of 'dry' grains, as well as cotton. Pepper grows wild in the forests of Nagar and Sorab, while cardamoms are produced in the jungles about Agumbi, though they are not so good as those raised in areca gardens. All kinds of 'wet' cultivation are carried on from the Sūlekere tank. The area occupied by rice in 1903–4 was 383 square miles; by *rāgi*, 141; gram, 72; other food-grains, 294; garden produce, 26; oilseeds, 27; sugar-cane, 14.

Agricultural loans.

During the twelve years ending 1904 a sum of Rs. 9,000 was advanced for land improvement, in addition to Rs. 14,300 for irrigation wells, and Rs. 7,000 for field embankments.

Irrigation.

The area irrigated from channels is 7 square miles, from tanks and wells 232, and from other sources 187 square miles. The number of tanks is 8,358, of which 583 are classed as 'major.'

Forests.

The State forests cover an area of 343 square miles, 'reserved' lands 153, and plantations 4. Teak, other timber, bamboos, and sandal-wood are the chief sources of forest income. The receipts in 1903–4 amounted to 4·6 lakhs.

Mines and quarries.

Iron is extracted in some parts. On the summit of the Ghāts stones are frequently found possessing magnetic properties, as at Kodachādri. Laterite is abundant in the west, and extensively quarried for building purposes. Gold is widely diffused, and a broad auriferous tract extends throughout the

eastern half of the District. The Honnāli gold-mines, which were commenced some time ago, have suspended work, owing partly to the influx of water. The Mysore-Nagar Company started work near Benkipur, but no good results have been obtained. Deposits of manganese have been discovered to the west of Shimoga, and large quantities have been raised.

Arts and manufactures.

The District is noted for its beautiful sandal-wood carving, of which industry Sorab is the principal seat. The chief articles of manufacture are coarse cotton cloth, woollen blankets, iron articles, brass and copper vessels, earthenware, jaggery, and oils. A few striped carpets are made at Shikārpur; pieces of chintz at Shimoga and Ayanūr; stone jugs at Tīrthahalli; handmills in the Honnāli *tāluk*, and ropes of various kinds. There are reported to be 970 looms for cotton, 402 for wool, 48 for other fibres, 424 iron-works, 12 brass and copper, 88 oil-mills, and 1,845 jaggery-mills.

Commerce and trade.

The recent opening of a branch railway from Shimoga to Birūr will no doubt stimulate trade. The most important articles of export are jaggery, earthenware, leathern goods, woollen blankets, and oils. Of imported articles, piece-goods take the first place, then woollen blankets, oils, gold ornaments, and vessels of brass, copper, and bell-metal.

Means of communication.

A branch of the Southern Mahratta Railway runs from Birūr (Kadūr District) to Shimoga town, of which 16 miles lie in the south-east of this District. A short line from Shimoga westwards is proposed, for the transport of the manganese ore discovered there. The length of Provincial roads is 219 miles, and of District fund roads 450 miles.

Divisions.

The District is divided into eight *tāluks*: Channagiri, Honnāli, Nagar, Sāgar, Shikārpur, Shimoga, Sorab, and Tīrthahalli. The following subdivisions were formed in 1903, and placed in charge of Assistant Commissioners: Shimoga and Tīrthahalli, with head-quarters at Shimoga; Honnāli, Shikārpur, and Channagiri, with head-quarters at Shimoga; Sāgar, Sorab, and Nagar, with head-quarters at Sāgar.

Judicial.

The District court at Shimoga exercises jurisdiction over Shimoga, Kadūr, and Chitaldroog Districts, while the Subordinate Judge's court at Shimoga deals with Shimoga District and a part of Kadūr and Chitaldroog Districts. There are also Munsifs' courts at Shimoga and Honnāli. In the border tract there is a certain amount of serious crime.

Land revenue.

The land revenue and total revenue are shown in the table on the next page, in thousands of rupees.

The revenue survey and settlement were introduced into the

north of the District between 1870 and 1874, and into the south between 1875 and 1878. In 1903–4 the incidence of land revenue per acre of cultivated area was Rs. 1–14–1. The average rate of assessment per acre on 'dry' land is R. 0–11–5 (maximum scale Rs. 2–8–0, minimum scale R. 0–0–6); on 'wet' land, Rs. 3 (maximum scale Rs. 6–8–0, minimum scale R. 0–2–0); and on garden land, Rs. 12–12–11 (maximum scale Rs. 25, minimum scale Rs. 1–8–0).

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	12,08	12,65	13,08	12,59
Total revenue . .	15,70	21,36	23,48	23,41

Local boards.

In 1903–4 there were ten municipalities—Shimoga, Kumsi, Channagiri, Honnāli, Nyāmti, Shikārpur, Sorab, Sāgar, Kalūrkatte, and Tīrthahalli—with a total income of Rs. 36,000 and an expenditure of Rs. 46,500. There were also four village Unions—Benkipur, Holehonnūr, Sirālkoppa, and Nagar—whose income and expenditure were Rs. 6,000 and Rs. 15,000. The District and *tāluk* boards had an income of Rs. 90,000 in 1903–4, chiefly derived from a share of the Local fund cess, and spent Rs. 78,000, including Rs. 70,000 on roads and buildings.

Police and jails.

The strength of the police force in 1904 was one superior officer, 93 subordinate officers, and 493 constables, of whom 2 officers and 30 constables formed the special reserve. In the 8 lock-ups the daily average of prisoners was 32.

Education.

In 1901 the percentage of literate persons was 5·3 (9·6 males, 0·4 females). The number of schools increased from 369 with 9,329 pupils in 1890–1 to 406 with 11,828 pupils in 1900–1. In 1903–4 there were 359 schools (242 public and 117 private) with 9,802 pupils, of whom 1,418 were girls.

Medical.

Besides the civil hospital at Shimoga town, there are 13 dispensaries, in which 101,732 patients were treated in 1904, of whom 434 were in-patients, the number of beds available being 32 for men and 26 for women. The total expenditure was Rs. 34,000.

Vaccination.

There were 2,685 persons vaccinated in 1904, or 5 per 1,000 of the population.

Shimoga Tāluk.—South-eastern *tāluk* of Shimoga District, Mysore, including the Kumsi sub-*tāluk*, and lying between 13° 42′ and 14° 8′ N. and 75° 16′ and 75° 53′ E., with an area of 687 square miles. The population in 1901 was 91,639, compared with 94,716 in 1891. The *tāluk* contains four

towns, SHIMOGA (population, 6,240), the *tāluk* and District head-quarters, Benkipur (2,676), Kumsi (2,001), and Holehonnūr (1,931); and 401 villages. The land revenue demand in 1903–4 was Rs. 1,77,000. The twin rivers, the Tunga and the Bhadra, entering the *tāluk* on the south, flow north and unite at Kūdali, north of Shimoga town, whence the Tungabhadra continues north with a winding course. The greater part of the *tāluk* in the west and south is covered with hills and forests, abounding in tigers, leopards, bears, and other wild animals. Cultivation is almost confined to the level valleys of the rivers, but the beds of these are too deep to be used for irrigation. On the other hand, timber is floated down, especially in the Tunga. The soils on either bank of the Tungabhadra to the north are very rich, and the climate is remarkably favourable to 'dry' cultivation. *Rāgi* is the staple crop on red soil, but the black soils produce *jola*, cotton, and oilseeds. The rice lands are poor. A little sugar-cane is grown, besides areca-nut, betel-vine, and plantains.

Sāgar.—Western *tāluk* of Shimoga District, Mysore, lying between 13° 51′ and 14° 20′ N. and 74° 38′ and 75° 18′ E., with an area of 666 square miles. The population in 1901 was 56,818, compared with 58,999 in 1891. The *tāluk* contains one town, Sāgar (population, 3,103), the head-quarters, and 245 villages. The land revenue demand in 1903–4 was Rs. 1,71,000. The west and great part of the north and south are bounded by the Western Ghāts, from which a ridge crosses the *tāluk* from west to east. The extreme west is not more than 8 miles from the sea. Devarkonda and Govardhangiri are the principal heights. The Sharāvati runs through the middle in a north-westerly direction, receiving the Yenne-hole at the frontier, where it turns west, forming the celebrated GERSOPPA FALLS, and continuing along the boundary. The Varada rises in the north-east and flows out north. The whole *tāluk* is considered Malnād, but the south-west and north-east, separated mostly by the Sharāvati, differ a good deal. In the former the rice-fields bear a double crop annually, but the areca, pepper, and cardamom gardens are somewhat inferior. This tract presents the appearance of a rolling stretch of bare hill-tops, with their sides and valleys densely wooded. The scenery is surpassingly beautiful, and the climate cool and pleasant even in the hottest season. The people live in scattered homesteads, and there are no villages with a collection of houses. The other parts of the *tāluk* are more level and open, but the climate is not so good. Only one crop of rice is raised in the year, but

the gardens are remarkably fine. As a rule the people live in villages, but there are many scattered homesteads, especially in the south-west. Except the great Hinni forest, south of the Gersoppa Falls, the remainder are chiefly *kāns* or tracts of evergreen forest containing self-sown pepper. Towards the south the forest is in patches, very dense inside but suddenly opening on bare spots containing nothing but grass. This is due to laterite, on which trees refuse to grow. The demand for leaf-manure for the gardens is ruining the forests, as they are mercilessly stripped for the purpose. The soil in the *kāns* is rich and deep, but in most of the *tāluk* it is hard and shallow, with much laterite. 'Dry' crops are of no importance, but rice is largely exported by the ryots to Gersoppa by the Govardhangiri and Hinni *ghāts*, that of the south being sent to Bhatkala or Baidūr. Areca-nuts are sent towards Bellary, but some also to Wālājāpet and to Birūr. Cardamoms and pepper go to the Kanara and Dhārwār markets.

Sorab.—North-western *tāluk* of Shimoga District, Mysore, lying between 14° 13′ and 14° 39′ N. and 74° 53′ and 75° 18′ E., with an area of 443 square miles. The population in 1901 was 71,493, compared with 70,047 in 1891. The *tāluk* contains one town, Sorab (population, 1,622), the head-quarters, and 307 villages. The land revenue demand in 1903–4 was Rs. 2,11,000. The Varada river runs through the west, at one point near Banavāsi leaving and re-entering the *tāluk*. From the south it receives the Dandāvati, which drains the east. The principal hill is Chandragutti (2,794 feet) in the west. Except in the west the country is gently undulating, with rice-fields and gardens in the valleys. Above the 'wet' lands are stretches of open 'dry' crop fields called *hakkal*, and in the highest ground the *kāns*, patches of virgin evergreen forest. On account of this the woodland scenery is unique, as the *kāns* are detached in small portions with clearly demarcated margins, due to the distribution of laterite. Outside, on the higher ground, the soil is only about 4 inches in depth, while within, 15 feet from the edge, it is deep and rich enough to support the largest forest trees. These *kāns* are full of wild pepper, but more value is attached to the *bagni*-palm, from which toddy is extracted by the Halepaikas. Rice, jaggery, and areca-nuts are the principal products of the *tāluk*. The best areca gardens are in the south and west. When the areca-palms reach a certain height, betel and pepper-vines are trained up the stem. Rice and sugar-cane of good quality are grown everywhere. The rice-fields are ploughed up as

soon as the crop has been cut, while the ground is still damp, and are left fallow till the early rain in May, no Vaisākh crop being raised.

Shikārpur Tāluk.—Northern *tāluk* of Shimoga District, Mysore, lying between 14° 5′ and 14° 31′ N. and 75° 8′ and 75° 32′ E., with an area of 429 square miles. The population in 1901 was 63,604, compared with 64,404 in 1891. The *tāluk* contains two towns, SHIKĀRPUR (population, 5,007), the head-quarters, and SIRĀLKOPPA (2,270); and 202 villages. The land revenue demand in 1903–4 was Rs. 1,80,000. The *tāluk* is crossed from south to north by the Choradi or Kumudvati, which forms the large Māsūr-Madag tank on the northern border. Lines of low hills on all sides, covered with jungle, give shelter to numerous tigers, leopards, and other wild animals. Malnād ('highland') and Maidān ('lowland') here meet, so that the country partakes of the character of both. The Jambu hills run down the middle; but the rest is gently undulating, the uncultivated parts being covered with scrub jungle, which in the south and west rises into forest. The best soil is in the north, on the banks of the Choradi. 'Dry' cultivation is most successful in the east. Sugar-cane and rice, especially the former, are the chief crops. Jaggery and rice are the principal exports, the former being sent mostly to Dhārwār, and the latter in various directions. Sirālkoppa is the chief market for grain, and Shikārpur for cloth.

Honnāli.—North-eastern *tāluk* of Shimoga District, Mysore, lying between 14° 4′ and 14° 22′ N. and 75° 24′ and 75° 51′ E., with an area of 331 square miles. The population in 1901 was 68,721, compared with 63,577 in 1891. The *tāluk* contains two towns, Honnāli (population, 3,894), the head-quarters, and NYĀMTI (3,461); and 165 villages. The land revenue demand in 1903–4 was Rs. 1,21,000. The *tāluk* is crossed from south to north by the Tungabhadra with a winding course, and bounded east and west by lines of low stony hills. The north and east consist of 'dry' crop country of unusual fertility, good black soil being common, and cotton and *jola* the chief crops. The extreme west is purely a rice country, with some sugar-cane, the staple 'dry' crop being *rāgi*. Very rich black soil prevails around Nyāmti and BELAGUTTI. The Honnāli gold-mines were started in the south-west, at the foot of the hills of which the Kalva Rangan peak (3,388 feet) is the highest, but they have ceased working for many years, owing partly to the influx of water. At a bend in the Tungabhadra, where the Hirehalla enters from the west, is the Kuruva island (14° 10′ N.

and 75° 45′ E.), containing a celebrated Rāmesvara *tīrtha* and temple.

Channagiri.—Eastern *tāluk* of Shimoga District, Mysore, lying between 13° 48′ and 14° 20′ N. and 75° 44′ and 76° 4′ E., with an area of 465 square miles. The population in 1901 was 81,453, compared with 74,218 in 1891. The *tāluk* contains one town, Channagiri (population, 4,775), the head-quarters, and 244 villages. The land revenue demand in 1903–4 was Rs. 1,45,000. The centre is occupied by the large SŪLEKERE tank, 40 miles round, which receives all the streams from the south, and from which the Haridrā issues to the north. The south and west are crossed by lines of hills. The rest of the *tāluk* is open country, with extensive grazing lands, which provide pasture for a superior type of cattle. In the north is a fertile tract containing much garden and sugar-cane cultivation. The western hills are included in the Shimoga auriferous band.

Tīrthahalli.—South-western *tāluk* of Shimoga District, Mysore, lying between 13° 27′ and 13° 56′ N. and 75° 2′ and 75° 31′ E., with an area of 476 square miles. The population in 1901 was 57,553, compared with 59,229 in 1891. The *tāluk* contains one town, Tīrthahalli (population, 2,623), the head-quarters, and 248 villages. The land revenue demand in 1903–4 was Rs. 1,81,000. The Tunga river enters the *tāluk* in the south and flows north-west to near Mulbāgal, where it is joined by the Begārhalla from the south. It then runs east, and turns north along the boundary. All the minor streams, said to number 75, flow into the Tunga, except a few in the north-west which join the Sharāvati. The *tāluk* is essentially Malnād—hills, forests, areca gardens, and running streams being general. The west rests on the Ghāts, and is covered with splendid forest, only the hill summits being bare. The chief heights within the *tāluk* are Kavaledurga (3,058 feet) and Kundadagudda (3,207 feet). Superior ironstone is found at Kabbinadagudda ('iron hill'), the iron made from which the natives consider to be as good as steel. The forest is disappearing, owing to the demand for leaf-manure for areca gardens. Areca-nuts, pepper, cardamoms, and rice, with a little coffee, are the principal products. Large vessels of potstone are made at Kavaledurga, and silver cups at Tīrthahalli.

Nagar Tāluk.—Western *tāluk* of Shimoga District, Mysore, lying between 13° 36′ and 14° 6′ N. and 74° 52′ and 75° 23′ E., with an area of 528 square miles. The population in 1901 was 40,455, compared with 42,841 in 1891. The *tāluk* contains two towns, Kalūrkatte (population, 918), the head-quarters, and

NAGAR (715); and 205 villages. The land revenue demand in 1903–4 was Rs. 1,16,000. Except in the north the *tāluk* is surrounded with mountains and hills, the streams from which flow north-west, uniting in the Sharāvati. Those in the south-west run directly down the Ghāts westward, and reach the sea at Coondapoor. In the north-west is the isolated Honnār *hobli* belonging to South Kanara, part of the endowments of a temple at Kollūr below the Ghāts. The principal mountain within the *tāluk* is Kodachādri (4,411 feet), in the north-west. North of this is the Kollūr *ghāt* road to the low country, and in the south-west the Haidargarh or Hosangadi *ghāt* road. The *tāluk* is purely Malnād or 'highland,' the whole densely wooded. The south is composed of a cluster of hills, in a basin formed by which is situated Nagar, the capital, formerly called Bednūr. The most open part is the valley of the Sharāvati. West of this the country becomes wilder and wilder as the Ghāts are approached. East and north of the Sharāvati the country is generally more level. The forests here are dense and contain more timber-trees than the west, where the soil is shallower, with much laterite. Areca-nuts, pepper, cardamoms, and rice are the products of this region. There are no 'dry' crops. The areca-nut is of the first quality, but the gardens largely belong to Brāhmans, who are dependent for their cultivation on imported labour. Rice is exported to the coast, and areca-nuts by way of Birūr to Bellary and Wālājāpet. All other articles of consumption and clothing are brought from the plain country, partly by merchants who come to buy areca-nuts, but chiefly by ryots from Tīrthahalli, Avinhalli, and Kollūr, either on bullocks or by porters.

Anantapur.—Village in the Sāgar *tāluk* of Shimoga District, Mysore, situated in 14° 5′ N. and 75° 13′ E., 29 miles from Shimoga town. Population (1901), 377. It was formerly a place of importance, and was originally named after Andh-āsura, a chief subdued by Jinadatta, the founder of the Humcha kingdom, in the eighth century. In the eleventh century Andhāsura belonged to the Chālukyas, and was included in the Sāntalige 'thousand' province[1]. In 1042 it was made an *agrahāra* for 1,200 Brāhmans, and in 1079 is spoken of as the capital. In the seventeenth century the Keladi king, Venka-tappa Naik, established here a Sivāchāra *math*, with a fine pond, called Champaka-sarasu, and gave the name Anandapura

[1] These numerical designations, almost invariably attached to the names of ancient divisions in Mysore, apparently refer to their revenue capacity or to the number of their *nāds*.

to the town, since changed to Anantapura. It was several times the object of attack during the wars of Haidar and Tipū's time, and again in the insurrection of 1830.

Araga.—Village in the Tīrthahalli *tāluk* of Shimoga District, Mysore, situated in 13° 45′ N. and 75° 13′ E., 5 miles north of Tīrthahalli town. Population (1901), 576. It was from early times the capital of the Male-rājya or hill kingdom, and was in the Sāntalige 'thousand' province[1]. The Sāntara kings of Humcha held it under the Chālukyas. In the fourteenth century, and later under Vijayanagar, the kingdom comprised three cities and eighteen *kampana* or districts, and gave its name to the Araga realm, which was governed by a prince of the royal family. The Keladi kings next held it till subverted by the conquests of Haidar Alī in 1763.

Bandalike (or *Bandanike*).—Ruined and deserted village in the Shikārpur *tāluk* of Shimoga District, Mysore, situated about 14° 27′ N. and 75° 18′ E., 16 miles from Shikārpur town. It was in the earliest times the capital of the Nāgarakhanda 'seventy' province[1], which an inscription says was ruled by the wise Chandra Gupta. Its Purānic name was Bāndhavapura. It contains many ruined temples of large dimensions and wonderful sculpture. More than thirty inscriptions, dating from the ninth to the sixteenth century, bear records of the Rāshtrakūtas, Chālukyas, Kalachuris, Hoysalas, Seunas, and Vijayanagar kings. The place was probably destroyed by the Muhammadans after the fall of Vijayanagar in 1565.

Basavāpatna.—Deserted town in the Channagiri *tāluk* of Shimoga District, Mysore, situated in 14° 12′ N. and 75° 49′ E., 16 miles from Channagiri town. It lies in a narrow valley enclosed by hills, and was the original seat of the chiefs who, when Basavāpatna was taken by the Bijāpur army in the invasion of 1637, retired to Tarikere, and are commonly identified with the former place. It was the seat of government for this part of the country under Bijāpur rule, and under the Mughals afterwards. Later it changed hands several times, and was held by the Marāthās for seven years. Haidar Alī dismantled the fort in 1763, and the Marāthās under Parasurām Bhao ruined the town in 1791. The fort was repaired in 1799, but the place never recovered its former prosperity. Near the fort was a mosque where Bābā Budan lived before he settled on the mountain called after him.

[1] These numerical designations, almost invariably attached to the names of ancient divisions in Mysore, apparently refer to their revenue capacity or to the number of their *nāds*.

Belagutti.—Town in the Honnāli *tāluk* of Shimoga District, Mysore, situated in 14° 11′ N. and 75° 31′ E., 10 miles south-west of Honnāli town. Population (1901), 2,799. The original form of the name was Belagavatti. It was the seat of a line of Nāga chiefs who called themselves Sindas. They ruled during the twelfth and thirteenth centuries, under the Chālukyas, Hoysalas, and Seunas. The place stands in a plain of fertile black soil.

Belgāmi (or *Balgāmi*).—Village in the Shikārpur *tāluk* of Shimoga District, Mysore, situated in 14° 24′ N. and 75° 15′ E., 14 miles north-west of Shikārpur town. Population (1901), 1,330. Its name appears in inscriptions as Balligāmve, Balligrāme, Balipura, and other similar forms. Even in the twelfth century it was of such antiquity as to be styled the mother of cities, the capital of ancient cities, the immemorial capital, and is said to derive its name from the giant Bali. On account of its religious merit it was called the Dakshina Kedāra, and also had the name Kamatha. Under the Chālukyas and Kalachuris it was the capital of the Banavāsi 'twelve thousand' province[1]. It contained five *maths*, with temples dedicated to Vishnu, Siva, Brahmā, Jina, and Buddha, and three *puras*, besides seven Brahmapuris. At the Kodiya *math* of the Kedāresvara temple medicine and food were dispensed to all comers. Of eighty-four inscriptions in the place most are of the eleventh and twelfth centuries. Its prosperity continued under the Hoysalas and Seunas, but the city no doubt fell a prey to the Muhammadan invaders of the fourteenth century who overthrew the Hoysala power. The ruined temples are rich with carving equal to any in Mysore.

Billesvara Betta.—Sacred hill in the Nagar *tāluk* of Shimoga District, Mysore, situated in about 13° 48′ N. and 75° 19′ E. It is the source of several streams, two running north-west to the Sharāvati, one north to the Tungabhadra, and one south to the Tunga.

Govardhangiri.—Fortified hill, 1,720 feet high, in the Sāgar *tāluk* of Shimoga District, Mysore, situated in 14° 10′ N. and 74° 40′ E., on the crest of the Ghāts overlooking the village of Gersoppa, which gives its name to the famous GERSOPPA FALLS. The original fort is said to have been erected in the eighth century by Jinadatta Rāya, who named it after the celebrated hill (see GIRI RĀJ) near the northern

[1] These numerical designations, almost invariably attached to the names of ancient divisions in Mysore, apparently refer to their revenue capacity or to the number of their *nāds*.

Muttra, whence he came. It is now quite deserted and overgrown with jungle. In front of a Jain temple is a metal pillar, with a long inscription of the sixteenth century, giving an account of the merchants of Gersoppa who erected it.

Humcha.—Village in the Nagar *tāluk* of Shimoga District, Mysore, situated in 13° 52′ N. and 75° 12′ E., 12 miles east of Nagar town. The original name was Pomburchchha, also called Patti Pomburchchha, which at a later period became Hombucha. It was the capital of a Jain principality founded in the eighth century by Jinadatta Rāya, who is said to have come from Muttra in Northern India. He was invested with sovereignty by the goddess Padmāvati, whose image he had brought with him. By her direction he touched with it his horse's bit, which was at once converted into a golden bit, and she conferred on him the power thus to transmute iron into gold. A descendant of his acquired the Sāntalige country (the Tīrthahalli *tāluk*), and the rulers thenceforward took the name of Sāntara. Around the village are extensive ruins, including those of large Jain temples. The Humcha *math* is one of the chief seats of the Jains in Mysore, but is now reduced to a very impoverished state.

Ikkeri.—Village in the Sāgar *tāluk* of Shimoga District, Mysore, situated in 14° 7′ N. and 75° 1′ E., 3 miles south of Sāgar town. Population (1901), 205. Ikkeri ('the two streets') was from about 1560 to 1640 the capital of the Keladi chiefs, afterwards removed to Bednūr. Ikkeri continued, however, to be the nominal capital, the Rājās were called by its name, and the coins were called Ikkeri pagodas and fanams, although the mint was removed. The walls were of great extent, forming three concentric enclosures. In the citadel was the palace, of mud and timber, adorned with carving and false gilding. The only building now remaining is the Aghoresvara temple. On the floor in front of the shrine are effigies of three of the kings, doing obeisance, with their names over each. Huchcha ('mad') Somasekhara is represented as manacled and fettered. The space between the central pillars, $18\frac{1}{2}$ feet, was the standard measure for garden land.

Keladi.—Village in the Sāgar *tāluk* of Shimoga District, Mysore, situated in 14° 13′ N. and 75° 1′ E., 4 miles north of Sāgar town. Population (1901), 1,595. It was the place of origin, at the close of the fifteenth century, of the chiefs who became kings of the whole of the north-west of Mysore, and of the Kanarese districts below the Ghāts, and continued in power till overthrown by Haidar Alī in 1763. They were at

first tributary to Vijayanagar, but assumed independence after the fall of that empire. The capital was first removed to Ikkeri, and eventually to Bednūr.

Kodachādri.—Mountain, 4,411 feet high, in the Nagar *tāluk* of Shimoga District, Mysore, situated in 13° 51′ N. and 74° 52′ E. It rises more than 2,000 feet above the villages below, and is clothed with splendid forests. The top of the hill is a narrow ridge, only 12 feet across in many places, and with a precipice on either side. On the west the hill descends almost perpendicularly for 4,000 feet, with the Kanara forests spread out below. The sea appears quite close, and the bay and town of Coondapoor lie opposite. On the hill is a temple to the Huli Deva or 'tiger god,' whose image is provided with thirty-two arms.

Kūdali.—Sacred village in the Shimoga *tāluk* of Shimoga District, Mysore, situated in 14° 0′ N. and 75° 49′ E., at the confluence (*kūdal*) of the Tunga and Bhadra, where they unite to form the Tungabhadra, 9 miles north-east of Shimoga town. Population (1901), 1,043. There are *maths* belonging to the Smārtas and the Mādhvas, the former called the Sringeri, specially founded for Marāthās, who notwithstanding plundered and burnt the place under Parasurām Bhao in 1791. The temples are old, and are dedicated to Brahmesvara, Narasimha, and Rāmesvara.

Malavalli.—Village in the Shikārpur *tāluk* of Shimoga District, Mysore, situated in 14° 29′ N. and 75° 19′ E., 20 miles north-west of Shikārpur town. Population (1901), 500. It is of interest on account of the Sātakarni inscription found on a pillar, probably of the second century, the oldest in Mysore next to the edicts of Asoka. From this it appears that the village was then called Mattapatti.

Nagar Town.—Town in the Nagar *tāluk* of Shimoga District, Mysore, situated in 13° 49′ N. and 75° 2′ E., 55 miles west of Shimoga town. Population (1901), 715, less than half what it was before the removal of the *tāluk* head-quarters in 1893. The place was originally called Bidaruhalli, 'bamboo village'; about 1640 it became the capital of the Keladi kings under the name of Bidarūr or Bidanūr (Bednūr). It grew so rapidly that it is said to have contained nearly 100,000 houses, and was called Nagara ('the city'). The walls were 8 miles in circumference, and had ten gates. The city was taken in 1763 by Haidar Alī, who gave it the name Haidarnagar, established there his principal arsenal and mint, and encouraged merchants to settle in the place. It suffered much during the wars with

Tipū Sultān, and in 1783 was captured by the British, but was retaken. Tipū desired to restore its prosperity, but his fanatical religious and other measures ruined the place. Nagar, as it was called from 1789, was a centre of the insurrection of 1830. The municipality, formed in 1881, became a Union in 1904. The receipts and expenditure during the ten years ending 1901 averaged Rs. 600. In 1903–4 they were Rs. 600 and Rs. 980.

Nyāmti.—Town in the Honnāli *tāluk* of Shimoga District, Mysore, situated in 14° 9′ N. and 75° 35′ E., 21 miles north of Shimoga town. Population (1901), 3,461. The original name was Nematti. In 1245 and 1247 severe fighting took place here between the Hoysalas and Seunas. In 1314 it was an *agrahāra* under the former. In 1396, under Vijayanagar supremacy, it was subject to the governor at Goa, who had charge of the Kadamba kingdom. The modern town seems to have been established by the Dīwān Pūrnaiya at the beginning of the nineteenth century. The merchants are all Lingāyats, and a considerable trade is carried on in exchanging the products of the Malnād for those of the Maidān. Much money was made here in the cotton trade during the American Civil War. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 2,700 and Rs. 3,100. In 1903–4 they were Rs. 2,200 and Rs. 2,500.

Sante Bennūr.—Town in the Channagiri *tāluk* of Shimoga District, Mysore, situated in 14° 10′ N. and 76° 0′ E., 8 miles west of Sāsalu railway station. Population (1901), 1,613. It was founded by a chief of the Basavāpatna family, probably in the sixteenth century. A palace was built by Hanumappa Naik, and an ornamental *honda* or reservoir made in front of the temple, with pavilions at the angles and in the centre. When Basavāpatna was taken by the Bijāpur forces, the Musalmāns destroyed the temple here and built a mosque on a large scale in its place, further erecting elegant upper storeys to the pavilions at the *honda*. The chief, who had been forced to retire to Tarikere, slew the Musalmān governor and desecrated the mosque in revenge. The Chitaldroog chief took the place early in the seventeenth century, but in 1717 it was captured by Bednūr, which held it till it fell into the hands of Haidar Alī in 1761. The Marāthās under Parasurām Bhao sacked the town in 1791. The mosque, never used since its desecration, and the *honda*, with its ruinous but graceful pavilions, are the only points of interest now left.

Shikārpur Town.—Head-quarters of the *tāluk* of the same name in Shimoga District, Mysore, situated in 14° 16′ N. and 75° 21′ E., 33 miles north-west of Shimoga town. Population (1901), 5,007. It was originally a village called Mālenhalli. The Keladi chiefs on gaining possession changed the name to Mahādanpur. During the time of either Haidar or Tipū it received the present name of Shikārpur or Shikāripur, 'hunting or hunters' town,' from the abundance of game met with during a royal hunt. It has a thriving trade in cloth. The old fort, at the east end, is now in ruins. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 2,800 and Rs. 2,400. In 1903–4 they were Rs. 4,500.

Shimoga Town.—Head-quarters of the District and *tāluk* of the same name, Mysore State, situated in 13° 56′ N. and 75° 35′ E., on the Tunga river, and terminus of the Birūr-Shimoga railway line. Population fell to 6,240 in 1901 from 11,340 in 1891, chiefly owing to plague. In early times Mandali, a suburb to the south, was an important place under the Gangas. At a later period Shimoga was ruled by the Chālukyas and the Hoysalas, after which it came under Vijayanagar. From the sixteenth century it was held by the Keladi or Bednūr kings, until Bednūr was taken by Haidar Alī in 1763. The Marāthās under Parasurām Bhao, in a battle near Shimoga in 1798, forced Tipū Sultan's army under the Benki Nawāb to retire on Bednūr, and besieged Shimoga, which had to capitulate, and was plundered and burnt. After the fall of Tipū in 1799 it was again pillaged by Dhundia Wagh, and left a heap of ruins. The present town has mostly sprung up during the last half of the nineteenth century, the Tunga being here crossed by a fine bridge. It is a principal station of the Roman Catholic and Wesleyan Missions. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 15,600 and Rs. 16,000. In 1903–4 they were Rs. 17,000 and Rs. 24,600.

Sirālkoppa.—Town in the Shikārpur *tāluk* of Shimoga District, Mysore, situated in 14° 23′ N. and 75° 15′ E., 11 miles north-west of Shikārpur town. Population (1901), 2,270. It is a place of trade between the western parts of Shimoga and the Bombay and Madras Districts to the north and east. It is the principal dépôt for jaggery, which is largely prepared in the *tāluk* and exported by the merchants of Sirālkoppa in exchange for piece-goods, blankets, &c. The municipality formed in 1880 became a Union in 1904. The receipts and

expenditure during the ten years ending 1901 averaged Rs. 2,000 and Rs. 1,700. In 1903-4 they were Rs. 2,000 and Rs. 7,000.

Tālagunda.—Village in the Shikārpur *tāluk* of Shimoga District, Mysore, situated in 14° 25′ N. and 75° 15′ E., 2 miles north-east of Belgāmi. Population (1901), 1,005. The original form of the name is Sthānagundūr. It was an *agrahāra* founded on the outskirts of the capital city Belgāmi by the Kadamba king Mukkanna or Trinetra, perhaps in the third century. Finding no Brāhmans in the south, he obtained from Ahichchatra 12,000 Brāhmans of thirty-two families, or according to other accounts 32,000 Brāhmans, and settled them here. The place is rich in ancient inscriptions, the most important of which is on a pillar in front of a ruined temple. It is of about the fifth century, beautifully engraved in what are called 'box-headed' characters, and contains in well-composed Sanskrit verses the only apparently authentic account that has been found of the origin and rise of the Kadamba dynasty, with other important historical information. There are mounds all over the site marking the ruins of the old *agrahāra*.

Area and boundaries.

Chitaldroog District (properly *Chitrakaldurga*).—District in the north of Mysore State, lying between 13° 35′ and 15° 2′ N. and 75° 38′ and 77° 2′ E., with an area of 4,022 square miles. It is bounded on the north by the Bellary District of Madras; on the east by Anantapur; on the south-east by Tumkūr; on the south-west by Kadūr; and on the west by Shimoga and the Dhārwār District of Bombay.

Physical aspects.

The whole of the District is included in the valley of the Vedāvati or Hagari, with the Tungabhadra running for a few miles along the north-western boundary. The Vedāvati enters the District in the south-west and flows in a north-easterly direction beyond Hiriyūr. From this point, where the stream begins to take the name of Hagari, it runs north, within a few miles of the main eastern boundary, and near the eastern base of the Molakālmuru projection crosses into Bellary District. During the hot months it is for the most part dry, but supplies a number of wells sunk in the sandy bed. The Tungabhadra receives at Harihar the Haridra, which flows out of the Sūlekere lake. The District is crossed by a belt, about 20 miles broad, of intermittent parallel chains of hills, mostly bare and stony, through which are several *kanaves* or passes. The eastern line runs from the frontier beyond Kankuppa to Chitaldroog and Jogimaradi (3,803 feet) to the west of Hiriyūr. The western line runs from Anajī by Māyakonda to Hosdurga (3,226 feet). Around Molakālmuru in the north are some

clusters of rocky hills, of which Nunke Bhairava is 3,022 feet high, Jatinga Rāmesvara 3,469 feet, and Santigudda 2,595 feet. Except in the region of the hilly belt, the whole extent of the District north and east is an open and level plain, entirely destitute of picturesque features, but possessing at certain seasons in favourable spots a vast expanse of verdant cultivation. Though there are no trees, excellent pasture is abundant, while the black and dreary-looking soil seems to require only the contact of water to develop its productiveness. To provide irrigation, the Māri Kanave dam is being built on the Vedāvati, which will form a reservoir with an area of 34 square miles. To the north and west of Chitaldroog the surface of the country is undulating, and covered with thick and rich grass. Trees are few in number.

The ranges of hills running through the middle of the District form part of the Chiknāyakanhalli schist band, which is a continuation of the Dambal band in Bellary District. The great granite massif of Chitaldroog divides it into two horns, and thence it runs south-south-west into Tumkūr District. The beds all strike parallel to the schist band, and for the most part dip steeply to the east. Talya is on the western gneiss, upon which rests a series of quartzites and some schistose hornblendic rocks. Above these are conglomerates, the pebbles of which are quartz or quartzite, much flattened, and the matrix is gritty, with much biotite or hornblendic material. East of this are ridges of haematite quartzite with some limestone beds, bordering a valley occupied by soft argillaceous schists. The wide stretch of flat country between the conglomerates and the eastern gneiss is occupied by felspathic, chloritic, and micaceous schists, with some pale hornblendic members. In this northern portion of the band extensive basic trap flows are noticed, the largest being that on the south-eastern side of the Chitaldroog granite which forms the Jogimaradi hill. The horseshoe of haematite-quartzite beds running round the same granite mass is also noteworthy. Geology.

Chitaldroog is the driest part of Mysore. The flora is practically the same as in Tumkūr District, though not so luxuriant. Great undulating plains, covered frequently with nothing but stones and dwarf species of mimosa, are dotted at wide intervals with villages lying in the hollows, sometimes having a few trees round them. These are the characteristics of fully one-third of the District. The valley of the Vedāvati looking towards Hosdurga is not so very bare, and in the north are jungles of *karāchi* (*Hardwickia binata*). Botany.

Climate and rainfall.

The annual rainfall at Chitaldroog averages 25 inches, the highest monthly average being 4 inches in both September and October. The mean temperature is 74° in January and 83° in May, with a diurnal range in both of 23°. In July the mean is 75° and the diurnal range 14°; in November, 74° and 18°.

History.

The discovery of edicts of Asoka in the Molakālmuru *tāluk* afford evidence that the north of the District was included in the Maurya empire in the third century B.C. The find of Sātakarni coins near Chitaldroog, and of Sātakarni inscriptions in the Shikārpur *tāluk* (Shimoga District), show that the Andhras or Sātavāhanas were in power here about the second century A.D. They were followed by the Kadambas, who became subject to the Chālukyas in the sixth century. Under the Gangas, Rāshtrakūtas, and Chālukyas, in succession, we find the Pallavas called Nonambas or Nolambas[1], from whom the District, with neighbouring parts to the north and east, obtained the name of Nolambavādi or Nonambavādi, a 'thirty-two thousand' province[2]. Their capital was at Penjeru or Henjeru, now Hemāvati, in Anantapur District, close to the eastern border of the Hiriyūr *tāluk*, but at one time was at Kampili on the Tungabhadra, north of Bellary. In the eleventh and twelfth centuries the Pāndyas of Uchchangi were ruling Nolambavādi. The Hoysalas then came into possession; but towards the end of the thirteenth century the Seunas, or Yādavas of Deogiri, gained some advantage over the Hoysalas, and established themselves for a short period in parts of the north-west, with their seat of government at Beltūr or Bettūr, near Dāvangere. On the Hoysalas recovering power they made Bemmattanakallu, the present Chitaldroog, the seat of government for the province. In the fourteenth century both Seunas and Hoysalas fell victims to the Musalmān invasions from Delhi. But the Vijayanagar empire now arose, and the Chitaldroog state was founded, in subordination to it, in the fifteenth century. This continued an important power till, after more than one effort, it was finally subjugated in 1779 by Haidar Alī, who deported 20,000 of the Beda population to people the island of Seringapatam. There was also a state with head-quarters at Hatti (now Nāyakanhatti), which acquired Molakālmuru from Rāyadurga. But this was absorbed into

[1] The existing caste of Nonabas represents its former subjects.

[2] These numerical designations, almost invariably attached to the names of ancient divisions in Mysore, apparently refer to their revenue capacity or to the number of their *nāds*.

the Chitaldroog territory. The other principal state was that of the Harati family round Dodderi in the east of the District. They were driven from there by the Bijāpur invasions of the seventeenth century, and established themselves at Nidugal, till subdued by Tipū Sultān in 1784. The District suffered severely from the Marāthā invasions of the eighteenth century, by which it was deprived of the great majority of its inhabitants, and entirely denuded of woods. The west and south again underwent much trouble in the rebellion of 1830.

The primitive stone structures known as kistvaens are called in the Molakālmuru *tāluk*, where the Asoka edicts were found, *moryara mane*, 'houses of the Moryas' or Mauryas[1]. There are also groups of stone circles called *morya dinne*, 'mounds of the Moryas,' which seem to be the sites of Beda encampments. At the Ankli *math*, west of Chitaldroog, are a remarkable long series of subterranean chambers, containing shrines, *lingams*, baths, and pedestals, the latter apparently for *yogāsana*. They are unused, and nothing is known of their history. An inscription at a cave close by is of the thirteenth century. At Anekonda near Dāvangere, and along the Tungabhadra, at Nandigudi, Vāsana, and Nanditāvare, are striking remains of temples, the latter of the Hoysala period. But the chief architectural monument is the Hariharesvara temple at Harihar. It is of the Chālukyan style, and was built in 1224 under the Hoysalas. Though shorn of many of its ornamental features, it was fortunately spared by the Muhammadan invaders of the seventeenth century, who contented themselves with using the roof as a mosque, making a small Saracenic doorway into the dome over the image of the god to serve as the *mimbar* or pulpit. The inscriptions of the District have been translated and published. Archaeology.

The population at each Census in the last thirty years was: (1871) 435,553, (1881) 310,511, (1891) 413,984, and (1901) 498,795. The decrease in 1881 was due to the famine of 1876–8. By religion, in 1901 there were 464,092 Hindus, 23,950 Musalmāns, 443 Christians, 801 Jains, and 9,506 Animists. The density was 124 persons per square mile, that for the State being 185. The number of towns is 14, and of villages 1,484. The largest town is DĀVANGERE (population, 10,402), while CHITALDROOG, the head-quarters, has only 5,792 inhabitants. The people.

[1] It appears they are also so called by the Badagas of the Nīlgiris, who are Kanarese immigrants from the north (*badaga*).

The following table gives the principal statistics of population in 1901 :—

Tāluk.	Area in square miles.	Number of: Towns.	Number of: Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Chitaldroog .	531	2	187	83,205	157	+ 25.0	4,904
Dāvangere . .	556	3	259	109,121	196	+ 15.4	5,521
Jagalūr . .	372	1	168	47,196	127	+ 23.5	1,797
Molakālmuru .	290	3	94	37,744	130	+ 15.9	1,602
Challakere . .	788	2	192	74,035	94	+ 21.9	2,881
Hiriyūr . .	635	1	152	48,464	76	+ 22.1	2,694
Hosdurga . .	567	1	252	45,032	79	+ 21.1 (Hosdurga and Holalkere)	3,505 (Hosdurga and Holalkere)
Holalkere . .	405	1	180	44,848	110		
District total	4,144	14	1,484	489,645	118	+ 20.5	22,904

NOTE.—Hosdurga, a sub-*tāluk* of Holalkere in 1901, was reconstituted a separate *tāluk* in 1902–3, and the areas and population of the last three are figures subsequent to the change. At the same time, 97 square miles from the Chiknāyakanhalli *tāluk* of Tumkūr District, and 25 square miles from the Kadur *tāluk* of Kadur District, were transferred to the Hosdurga *tāluk*.

Castes and occupations.

The most numerous castes are Lingāyats, 96,000, and Bedas, 85,000. There are 54,000 Wokkaligas or cultivators; 47,000 Mādigas and 9,000 Holeyas, both outcaste tribes; 37,000 Gollas or cow-keepers; and 30,000 Kurubas or shepherds. Of Brāhmans there are 7,000. Of Musalmāns two-thirds are Shaikhs, 16,000. The nomad Lambānis number 7,000, and Korachas 2,000. By occupation 60 per cent. of the population are dependent on agriculture and pasture; 19 per cent. on the preparation and supply of material substances; and 8·9 per cent. on unskilled labour not agricultural.

Christian missions.

Christians number only 443, the smallest number in any District in Mysore; and of these, 386 are natives. There is no mission station, but Wesleyan missionaries from Shimoga visit Dāvangere and other places.

General agricultural conditions.

Black cotton soil prevails throughout the *tāluks* north and west of Chitaldroog town, interspersed with sandy and gravelly tracts. In the west a red and loamy soil occupies the valleys. In the south the soil contains much salt, and on that account is favourable to the growth of coco-nut palms, of which there are large plantations. The *tāluks* in the east have a light sandy soil abounding in springs. These *talpargis* or spring-heads may be tapped at short distances from each other. The water is either conducted by narrow channels to the fields, or a well is constructed, from which the water is raised by two or four bullocks. Except in the Chitaldroog *tāluk*,

these wells are for the most part found east of a nearly central line drawn from north to south.

Chief agricultural statistics and principal crops.

The following table gives the chief statistics of cultivation in 1903-4:—

Tāluk.	Area in square miles, shown in the revenue accounts.				
	Total.	Cultivated.	Irrigated.	Forests.	Cultivable waste.
Chitaldroog	518	234	14	50	48
Dāvangere	547	417	8	17	28
Jagalūr	369	178	5	45	30
Molakālmuru	280	92	15	45	24
Challakere	783	210	24	...	184
Hiriyūr	627	229	13	84	67
Hosdurga	555	139	13	43	74
Holalkere	404	137	7	42	45
Total	4,083	1,636	99	326	500

Chitaldroog, Hiriyūr, Māyakonda, Dāvangere, and Bilchod produce cotton, which is also grown, though in smaller quantities, in Anaji, Kankuppa, and Molakālmuru. Flax for the manufacture of linseed-oil is raised in Dāvangere, Kankuppa, and Bilchod. All the northern *tāluks* produce wheat, *jola*, *navane*, sugar-cane, and *chenna*. Rice is less abundant. Cumin seed is grown in the north-east. In the south, about Mattod, are extensive groves of coco-nut palms, growing in the 'dry' lands without irrigation. The cultivation in the south-west consists of the ordinary 'dry' crops raised on red soil. All along the east, wells are largely used in raising crops by irrigation, including *rāgi*, which on the Bellary border is cultivated in no other way. The area occupied by the various crops in 1903-4 was: *rāgi*, 261 square miles; rice, 63; other food-grains, 866; gram, 223; oilseeds, 141; cotton, 89; garden produce, 15; sugar-cane, 5.

Agricultural loans.

During the twelve years ending 1904 there was advanced a sum of 1·8 lakhs for irrigation wells and Rs. 40,000 for field embankments. For land improvements the advances amounted to Rs. 33,000.

Irrigation.

There were 6 square miles irrigated from channels, 89 from tanks and wells, and 7 from other sources. The number of tanks is 703, of which 133 are 'major' tanks.

Forests.

The State forests cover an area of 93 square miles, 'reserved' lands 111, and plantations 121. The receipts in 1903-4 amounted to Rs. 42,000. One of the most important timbers is the *kammar*. There is no sandal-wood.

Mines and minerals.

Clay ironstone constitutes some ranges of hills near Chitaldroog town. Drawing slate is also found in the neighbourhood. Schorl in quartz is met with near Harihar. Potstone and actinolite occur frequently in pockets near Mattod. The latter has a considerable admixture of iron, and when decomposed becomes quite red. Asbestoid is found in the potstone near Talya, and ligniform asbestos among the Māyakonda hills. Lamellar actinolite occurs at Harihar. A mineral resembling brown-spar is obtained near Talya and Anaji. Near the former place, and elsewhere among the Chitaldroog hills, is found iron-glance. Carbonate of soda is abundant. Land has been taken up for exploration for gold to the north of Chitaldroog, and gold-mining has been commenced at Borimaradi in the Hiriyūr *tāluk*, but so far with uncertain results.

Arts and manufactures.

The most general manufactures are those of blankets and piece-goods. The finest blankets are made in the Dāvangere and Jagalūr *tāluks*, both white and black, as well as checked. Some have been turned out, valued at Rs. 200 to Rs. 300, of so fine a texture that they could be rolled up into a hollow bamboo, and yet were considered impervious to water. The ordinary kinds are made more or less everywhere. Cotton fabrics are produced in the greatest quantity near Harihar, in the Chitaldroog *tāluk*, and in the north of Molakālmuru. Coarse cloths are to some extent made in all *tāluks*, and in Dāvangere and Hosdurga cotton thread is largely spun by the women. In the latter, red and coloured handkerchiefs are made. A large cotton-ginning factory has been established at Dāvangere by a European firm. Silk manufactures are confined to the Molakālmuru and Harihar *tāluks*. In the former are produced cloths for men and women, with scarves and turbans, and women's *sārīs* of silk and cotton interwoven. In Harihar white and black check cloths are woven of raw silk from Bangalore. Iron and some steel are manufactured in the Hiriyūr, Hosdurga, and Chitaldroog *tāluks*. Brass vessels are prepared in the north of Molakālmuru. Glass bangles are made at Mattod, and leathern articles, such as slippers and buckets, in Molakālmuru. Blue and red dyes are manufactured at Harihar. There are reported to be 8 looms for silk, 7,677 for cotton, 1,354 for wool, 31 iron-works, 95 oil-mills, and 80 jaggery and sugar-mills.

Commerce and trade.

The chief mart is Dāvangere. But there is also considerable traffic between the Nagar Malnād and the eastern Districts through Holalkere and Huliyār, and with Bellary and Districts to the north through Tallak and other places in the Challakere

tāluk. Agents of Bombay firms are stationed at Dāvangere for the purpose of buying up oilseeds, &c.

The Southern Mahratta Railway from Bangalore to Poona runs throughout the west of the District for 59 miles. The length of Provincial roads is 219 miles, and of District fund roads 248 miles. Means of communication.

The scanty rainfall specially exposes this District to threatenings of famine. In 1884–5, in 1891–2, and in 1895–6 there were symptoms of distress. In 1896–7 a remission was granted of half the assessment on waste 'wet' lands, as a measure of relief. The Māri Kanave reservoir and channels are designed as a protection against famine. Famine.

The District is divided into eight *tāluks*—Challakere, Chitaldroog, Dāvangere, Hiriyūr, Holalkere, Hosdurga, Jagalūr, and Molakālmuru. The following subdivisions were formed in 1903 and placed under Assistant Commissioners: Chitaldroog; Dāvangere, Holalkere, Hosdurga, and Jagalūr, with head-quarters at Dāvangere; Challakere, Molakālmuru, and Hiriyūr, with head-quarters at Chitaldroog. Divisions.

The District and Subordinate Judge's courts at Shimoga have jurisdiction in this District, the former over the whole, and the latter over a part. At Chitaldroog there is a Subordinate Judge's court for the rest of the District. Near the frontier cases of serious crime are fairly common. Judicial.

The land revenue and total revenue are shown below, in thousands of rupees:— Land revenue.

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . .	5,97	6,11	7,14	7,48
Total revenue . .	7,36	9,07	11,78	11,54

The revenue survey and settlement were introduced into the west between 1865 and 1868, and into the east in 1869 and 1872. The incidence of land revenue per acre of cultivated area in 1903–4 was R. 0–10–8. The average assessment per acre on 'dry' land is R. 0–5–10 (maximum scale Rs. 2, minimum scale R. 0–1–0); on 'wet' land, Rs. 2–13–5 (maximum scale Rs. 7, minimum scale R. 0–3–0); and on garden land, Rs. 3–15–7 (maximum scale Rs. 12, minimum scale R. 0–12–0).

In 1903–4 there were nine municipalities—Chitaldroog, Dāvangere, Harihar, Hosdurga, Holalkere, Challakere, Hiriyūr, Jagalūr, and Molakālmuru—with a total income of Rs. 41,000 and an expenditure of Rs. 55,000. There were also six Local boards.

Unions—Bāgūr, Malebennūr, Turuvanūr, Nāyakanhatti, Rāmpur, and Devasamudra—with a total income of Rs. 6,000 and an expenditure of Rs. 14,000. The District and *tāluk* boards had an income of Rs. 51,000, chiefly derived from a share of the Local fund cess, and spent Rs. 48,000, including Rs. 34,000 on roads and buildings.

Police and jails. The strength of the police force in 1903-4 was one superior officer, 88 subordinate officers, and 573 constables. There are 9 lock-ups, containing a daily average of 21 prisoners.

Education. The percentage of literate persons in 1901 was 4·6 (8·6 males, 0·4 females). The number of schools rose from 435 with 9,058 pupils in 1890-1 to 437 with 12,417 pupils in 1900-1. In 1903-4 there were 427 schools (215 public, 212 private) with 10,719 pupils, of whom 1,071 were girls.

Medical. Besides the civil hospital at Chitaldroog there are 10 dispensaries, at which 80,225 cases were treated in 1904, of whom 221 were in-patients, the number of beds available being 15 for men and 15 for women. The total expenditure was Rs. 21,000.

Vaccination. The number of persons vaccinated in 1904 was 5,347, or 11 per 1,000 of the population.

Chitaldroog Tāluk.—Central *tāluk* of Chitaldroog District, Mysore, lying between 14° 3′ and 14° 28′ N. and 76° 6′ and 76° 35′ E., with an area of 531 square miles. The population in 1901 was 83,205, compared with 66,546 in 1891. There are two towns, CHITALDROOG (population, 5,792), the headquarters, and TURUVANŪR (5,035); and 187 villages. The land revenue demand in 1903-4 was Rs. 1,22,000. A range of rocky hills running north and south divides the *tāluk* into two almost equal portions. Towards the north the range is narrow and the hills bare and insignificant, but south of Chitaldroog it spreads out into greater width, and the hills are loftier and peculiarly striking in appearance. The country east and west of the range is comparatively flat and free from jungle. To the east black soil preponderates, while to the west the country is for the most part composed of red soil. The west is better supplied with reservoirs than the east and contains the large Bhīmasamudra tank. 'Dry' crops are cultivated principally on the east side, *rāgi* on the west side being frequently sown in garden and rice lands. The kind of rice cultivated is *sāl bhatta*, which requires little water and thrives upon the rainfall alone, though generally planted near a tank or nullah in case of need.

Dāvangere Tāluk.—North-western *tāluk* of Chitaldroog

District, Mysore, including the Harihar sub-*tāluk*, and lying between 14° 13′ and 14° 38′ N. and 75° 38′ and 76° 10′ E., with an area of 556 square miles. The population in 1901 was 109,121, compared with 94,565 in 1891. There are three towns, DĀVANGERE (population, 10,402), the head-quarters, HARIHAR (5,783), and Malebennūr (2,056); and 259 villages. The land revenue demand in 1903-4 was Rs. 1,86,000. The Tungabhadra river runs along the western boundary, receiving the Haridra from the south near Harihar. The south-west is bounded by a chain of hills skirting the right bank of the Tungabhadra. Except where a low range crosses from east of Māyakonda to Anaji, the *tāluk* is a wide unbroken plain, sloping down to Harihar and the river in the north-west, on which the insignificant Bāti hill makes a conspicuous figure, while Uchchangidurga looms formidable on the north-east just over the border. Black soil prevails in the west, and stony or gravelly soil in the east, but these are often intermixed, together with patches of red. The chief crops cultivated are *jola*, cotton, and *rāgi*. Rice and sugar-cane are grown to a small extent near tanks. The *tāluk* is noted for the manufacture of blankets, of which some of the finest texture are valued as high as from Rs. 200 to Rs. 300.

Jagalūr.—Northern *tāluk* of Chitaldroog District, Mysore, lying between 14° 24′ and 14° 42′ N. and 76° 7′ and 76° 32′ E., with an area of 372 square miles. The population in 1901 was 47,196, compared with 38,229 in 1891. The *tāluk* contains one town, Jagalūr (population, 3,307), the head-quarters, and 168 villages. The land revenue demand in 1903-4 was Rs. 60,000. The country is slightly undulating, except where a low and rugged range of hills, covered with thorn jungle, runs from the middle to the north-west. The Chiknāyakanhalli auriferous band crosses the *tāluk* on both sides of this range. The Janagahalla river flows along the east, and a stream from the Anaji tank along the west. The soil in the south is superior to that in the north. Black soil predominates near Jagalūr and Bilchod. Cotton and white *jola* are grown only on the black soil. Rice and sugar-cane are much cultivated.

Molakālmuru.—North-eastern *tāluk* of Chitaldroog District, Mysore, lying between 14° 34′ and 15° 2′ N. and 76° 36′ and 76° 52′ E., with an area of 290 square miles. The population in 1901 was 37,744, compared with 32,560 in 1891. There are three towns, Molakālmuru (population, 2,915), the head-quarters, Devasamudra (2,004), and Rāmpura

(1,845); and 94 villages. The land revenue demand in 1903–4 was Rs. 54,000. The *tāluk* is a long and narrow strip of country jutting into Bellary District. A few isolated villages on the west are entirely separated from the remainder. The surface is very undulating, and except where rice and garden lands exist is covered with rocks and loose stones. A range of bare rocky hills runs right across the *tāluk* from south-east to north-west, among which are the Nunke Bhairava hill (3,022 feet) and the Jatinga Rāmesvara hill (3,469 feet). More than a third of the surface is occupied by these hills, which are so barren that not a blade of grass or a tree will grow on their sides. Nearly 9 square miles in the south are taken up with *kammar* jungle. The south is comparatively level, but the soil very poor. The Janagahalla river runs along the western boundary for a short distance, and then turns north-east across the *tāluk* under the name of Chinna-Haggari, receiving the drainage of the bare rocky hills around. All tanks of any importance are close to the river and fed by channels from it. Wells are numerous, and two crops of rice are raised in the year by their means. Betel-vines, tobacco, wheat, and *jola* are also grown, the first in the north for the Bellary market. Blankets, coarse cotton cloth, women's *sārīs* with silk borders, and tape for belts, are the principal manufactures. Iron ore from the Kumārasvāmi hill in Sandūr is smelted in one or two villages.

Challakere.—North-eastern *tāluk* of Chitaldroog District, Mysore, lying between 14° 4′ and 14° 37′ N. and 76° 27′ and 77° 2′ E., with an area of 788 square miles. The population in 1901 was 74,035, compared with 60,711 in 1891. There are two towns, Nāyakanhatti (2,858) and Challakere (population, 2,000), the head-quarters; and 192 villages. The land revenue demand in 1903–4 was Rs. 1,10,000. The Vedāvati river flows through the east from south to north, receiving two streams from the west. The surface of the *tāluk* is comparatively flat, with a few rocky ridges or bare hills. Date groves occur in some parts, and groups of *babūl* in tank-beds and along the river. Except for these, the country generally presents a bleak and barren appearance. An area of 104 square miles is occupied by Amrit Mahāl grazing-grounds. The soil is mostly red and sandy, but in the south-west corner there is some good black soil. The surface is often covered with loose stones, solid rock constantly crops up, and enormous boulders are found even in cultivated fields. In many villages the soil is impregnated with saline matter, which causes a

white efflorescence on the surface. This soil is cultivated, but produces very poor crops. The tanks are numerous, but few are of the first class. Wells are more relied upon, many of which tap *talpargis* or spring-heads. Great attention is paid to the cultivation of rice and other irrigated cereals, as well as to the coco-nut and areca-nut gardens, but 'dry' crop cultivation is carried on in a slovenly and careless manner. *Sajje* and *sāve* are the principal 'dry' crops, but castor-oil, horse-gram, *rāgi*, and *jowār* are also grown. The two latter, however, as well as wheat, *navane*, and tobacco, are almost always raised on irrigated lands. Cotton is grown in small quantities, chiefly on the black soil.

Hiriyūr.—South-eastern *tāluk* of Chitaldroog District, Mysore, lying between 13° 41′ and 14° 12′ N. and 76° 26′ and 76° 57′ E., with an area of 635 square miles. The population in 1901 was 66,290, compared with 45,974 in 1891. After the reconstruction of the *tāluk* in 1903 the population was 48,464. The *tāluk* contains one town, Hiriyūr (population, 2,213), the head-quarters, and 152 villages. The land revenue demand in 1903–4 was Rs. 57,000. The south-west is crossed by parallel ranges of low rocky hills. Through a gorge called the Māri Kanave in these hills the Vedāvati flows north-east across the centre of the *tāluk* to some distance beyond Hiriyūr, where it receives a considerable stream from the south, and turns north. The south-west is peculiarly barren in appearance, being covered with masses of hills, scantily clothed with jungle and generally capped with black rock. No gardens or tanks relieve the harshness of the landscape. Everywhere stones cover the ground, even in the fields. These hills are included in the auriferous Chiknāyakanhalli band. In the north-west, Aymangala is a flat and stony country, but contains much black soil. The rest of the *tāluk* is separated by an abrupt and decided line, nearly identical with the Hiriyūr-Bangalore high road, north of which is black soil, and south of it red, but stony and broken. *Jola* and cotton are the principal products of the black soil, *rāgi* and *avare* of the red. Iron is smelted at Arsingundi, Chikka Byāladakere, and other villages, there being a large manufacture of shoes for bullocks and horses at the latter. At Mattod are glass-works, formerly very extensive, occupied in making glass bangles for women.

Hosdurga.—South-western *tāluk* since 1902 (previously a sub-*tāluk* of Holalkere) of Chitaldroog District, Mysore, lying between 13° 35′ and 14° 5′ N. and 76° 6′ and 76° 34′ E., with an area of 567 square miles. The population in 1903

was 45,032. The *tāluk* contains one town, Hosdurga (population, 2,263), the head-quarters, and 252 villages. The land revenue demand in 1903-4 was Rs. 72,000. The Vedāvati flows through the middle of the *tāluk*, with a north-easterly course, forming on the eastern border the great Māri Kanave reservoir. The Chiknāyakanhalli auriferous band of hills runs through the east. Hosdurga (3,226 feet), in the centre of the *tāluk*, is the principal hill.

Holalkere.—South-western *tāluk* of Chitaldroog District, Mysore (which included Hosdurga as a sub-*tāluk* up to 1902), lying between 13° 52′ and 14° 15′ N. and 76° 2′ and 76° 25′ E., with an area of 405 square miles. The population in 1901 was 81,204, compared with 67,051 in 1891. After the reconstruction of the *tāluk* in 1903 the population was 44,848. The *tāluk* now contains one town, Holalkere (population, 3,418), the head-quarters, and 180 villages. The land revenue demand in 1903-4 was Rs. 87,000. To the east and north are chains of hills included in the Chiknāyakanhalli auriferous band. There is also a group in the west, covered with low jungle. The rest of the *tāluk* is comparatively flat, with red soil, though black soil is found in the south-west. There is good grazing towards the centre. The drainage is mostly north-west to the Sūlekere tank.

Bettūr.—Village in the Dāvangere *tāluk* of Chitaldroog District, Mysore, situated in 14° 30′ N. and 76° 7′ E., 2 miles north of Dāvangere town. Population (1901), 1,210. It appears to have been the old capital of a principality, the original form of the name being Beltūr. At the end of the thirteenth century it was taken by the Seuna general, and made the seat of government during the ascendancy of the Seunas over the north of the Hoysala dominions.

Brahmagiri.—Hill in the Molakālmuru *tāluk* of Chitaldroog District, Mysore, situated in 14° 48′ N. and 76° 49′ E. Here, in 1892, were discovered Asoka edicts engraved on a great boulder. Isila, to the authorities of which they are addressed, may be the 'Sidda-' of Siddapura, the village close by on the west. A fort on the hill, called Hāneyakote, was held by the Chola chiefs of Nidugal, when it was taken by the Hoysala king Ballāla at the end of the twelfth century.

Būdihāl.—Village in the Hosdurga *tāluk* of Chitaldroog District, Mysore, situated in 13° 37′ N. and 76° 25′ E., 16 miles south-east of Hosdurga town. Population (1901), 1,118. The fort was built here about the fifteenth century by a chief who was invested with authority by the king of Vijayanagar. After the fall of that power, the Tarikere chiefs

seized the place, but it was taken from them by the Sultān of Bijāpur, and subsequently formed a district of the province of Sīra under the Mughals. The *poligār* of Chitaldroog and the Marāthās in turn held it, until it was taken by Haidar Alī in 1761. The Marāthās again seized it in 1771, but it was recovered in 1774. In 1790 it was once more in the hands of the Marāthās, but was restored at the peace of 1792. It was one of the last places at which the insurgents under the Tarikere *poligār* created disturbances in 1831.

Chitaldroog Town.—Head-quarters of the District and *tāluk* of the same name in Mysore, situated in 14° 13′ N. and 76° 24′ E., 24 miles north-east of Holalkere railway station. Population (1901), 5,792. Traces of an ancient city, named, it is said, Chandrāvali, are found immediately to the west. The Buddhist lead coins discovered there some time ago indicate that it belonged to the Andhra or Sātavāhana kings of the second century A.D. The modern town was owned in turn by the Rāshtrakūtas, Chālukyas, Hoysalas, Seunas, and Vijayanagar, and was named Bemmattanakallu or Bemmattanūru. The Chitaldroog chiefs, who were of the Beda or Boya caste, after settling in various parts of the District, were established here in the sixteenth century, and on the fall of Vijayanagar assumed independence. Before this they had fortified the hill; and it received the name of Chitrakal-durga, perhaps for Chatrikal, 'umbrella rock,' there being a striking peak of this form to the south-west, considered sacred by both Hindus and Muhammadans. Another peak to the south has a temple of the goddess Obala at the top, a special object of worship to the Bedas. The principal temple in the town is that of Uchchangiamma, a building of two storeys. The present extensive fortifications and batteries were erected at the end of the eighteenth century under Haidar and Tipū, by whom were also constructed the numerous granaries and pits for storing oil and *ghī*. The palace in the inner fort, erected by Tipū Sultān, with a fine fruit garden, is now occupied as a cutcherry. Beyond this was the arsenal, where a large mill, probably used for the manufacture of gunpowder, has lately been discovered. For some time after 1799 Chitaldroog was garrisoned by British troops, but was given up on account of its unhealthiness. To the north-west, 3 miles distant, is the Murgi *math*, the residence of the chief *gurū* of the Sivabhaktas or Lingāyats. Among a wildly rugged and picturesque group of hills to the west is the Ankli *math*, of recent date. A curious long series of subterranean chambers, of various sizes at different levels,

exists here. They contain shrines, *lingams*, baths, and pedestals, apparently meant for *yogāsana*. They may be from 300 to 500 years old in their present form, but the caverns must have existed long before. At the Pancha Linga cave, near the entrance, is a Hoysala inscription of 1286. About 3 miles south of Chitaldroog is the Jogi-matti or maradi, a hill 3,803 feet high, which has been used as a hot-season resort. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 13,200 and Rs. 13,100. In 1903-4 they were Rs. 11,000.

Dāvangere Town.—Head-quarters of the *tāluk* of the same name in Chitaldroog District, Mysore, situated in 14° 28′ N. and 75° 55′ E., on the Southern Mahratta Railway. Population (1901), 10,402. It was originally an obscure village, a suburb of Bettūr. Haidar Alī gave it as a *jāgīr* to a Marāthā chief named Apoji Rām, who encouraged merchants to settle there. He died without heirs, but the place continued to increase, being favoured by Tipū Sultān, and is now the most populous town in the District. The merchants are principally Sivabhaktas or Lingāyats. The most valuable trade is that with Wālājāpet in North Arcot in the east, and with Nagar and Sāgar in the west. Areca-nuts and pepper from the latter are exchanged for goods from Europe and China, and articles from the eastern islands imported through Madras, as well as salt. Blankets made in the District are sent to the Malnād. There is a large trade in cotton, and a cotton-ginning factory has been established by a European firm. Agents of Bombay houses are stationed here for the purchase of oilseeds, &c. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 14,200 and Rs. 12,600. In 1903-4 they were Rs. 17,000 and Rs. 29,000.

Harihar.—Head-quarters of a sub-*tāluk* in the Dāvangere *tāluk* of Chitaldroog District, Mysore, situated in 14° 31′ N. and 75° 48′ E., on the Tungabhadra river and the Southern Mahratta Railway. Population (1901), 5,783. According to tradition, it was the stronghold of a giant named Guha or Guhāsura, who by his austerities had won from Brahmā the boon of immunity from death at the hands of either Hari (Vishnu) or Hara (Siva). To relieve gods and men from his torment and break the spell, the two gods united into the one form Harihara and destroyed him. It was at an early period an *agrahāra* for Brāhmans, favoured by the Chālukyas and other royal lines. In the twelfth century it was included in

Nonambavādi, governed by the Pāndyas of Uchchangi. The fine temple of Hariharesvara was built in 1223 under the Hoysalas, by their general Polālva. The Seunas afterwards held it, and their general Sāluva Tikkama added some buildings in 1277. Many benefactions were bestowed down to the sixteenth century by the Vijayanagar kings, one of the founders of which line assumed the name of Harihara-Rāya. After the fall of Vijayanagar the place was seized by the Tarikere chiefs, who erected the fort. From them it was taken by the Nawāb of Sāvanūr, who granted it in *jāgīr* to Sher Khān. While in possession of the Muhammadans the temple was left intact, but the roof was used for a mosque, a small Saracenic doorway being made in the tower for the pulpit. Harihar was afterwards sold to Bednūr, and later held by the Marāthās till taken by Haidar Alī in 1763, since which time it has been thrice captured by the Marāthās. Until 1865 a native regiment was stationed in the cantonment 2 miles north-west of Harihar. In 1868 was completed the fine bridge across the Tungabhadra for the trunk road towards Bombay. There is now also a separate bridge for the railway. The municipality dates from 1871. The receipts and expenditure during the ten years ending 1901 averaged Rs. 5,700 and Rs. 5,600. In 1903–4 they were Rs. 4,000.

Jatinga Rāmesvara.—Hill, 3,469 feet high, in the Molakālmuru *tāluk* of Chitaldroog District, Mysore, situated in 14° 50′ N. and 76° 51′ E. It is one of the places where edicts of Asoka have been discovered, and consists of a long ridge, having towards the western end an ancient temple of Rāmesvara, the present building for which was erected in 962.

Nāyakanhatti.—Town in the Challakere *tāluk* of Chitaldroog District, Mysore, situated in 14° 28′ N. and 76° 33′ E., 14 miles north-west of Challakere town. Population (1901), 2,858. The name was formerly Hatti. It was founded by a Naik, who came here with large droves of superior cattle from near Srīsailam in Kurnool District in search of pasture. He was recognized as a *poligār* by Vijayanagar, and exchanged some of his cattle for Molakālmuru. The territory was captured by the chiefs of Chitaldroog, and was held by them till subdued by Haidar Alī. At Nāyakanhatti is a tomb and temple dedicated to a Mahāpurusha or saint of the Lingāyats, to which sect most of the people belong. The municipality, formed in 1899, became a Union in 1904. The receipts and expenditure for two years ending 1901 averaged Rs. 1,500 and Rs. 500. In 1903–4 they were Rs. 1,100 and Rs. 3,300.

Nirgunda.—Village in the Hosdurga *tāluk* of Chitaldroog District, Mysore, situated in 13° 47′ N. and 76° 11′ E., 7 miles west of Hosdurga town. Population (1901), 352. It was in ancient times the capital of a 'three hundred' province [1] of the same name, held under the Gangas in the eighth century. It is said to have been founded long before by a king from the north, who named it Nīlāvati. During the Hoysala period it was ruled by Ganga princes. In the thirteenth century a merchant restored the temple and also repaired the tank, which had been breached for a very long period, and the king endowed an *agrahāra* for Brāhmans. In the sixteenth century the Vijayanagar king seems to have established a bank for the Brāhmans, and it was a place of trade for the Lingāyats. Later on, owing apparently to some epidemic, it was deserted in favour of Bāgūr.

Nunke Bhairava.—A bare rocky hill, 3,022 feet high, in the north-east of Chitaldroog District, Mysore, situated in 14° 44′ N. and 76° 47′ E. The Kadambas had a fort here called Lunkeya-kote. In a remarkable enclosed ravine on this hill, with no visible outlet at either end, is an ancient temple of Nunke Bhairava or Lunkesvara, built by a Kadamba prince in the tenth century. It is served by a succession of Gosains from Northern India.

Siddapura.—Village in the Molakālmuru *tāluk* of Chitaldroog District, Mysore, situated in 14° 49′ N. and 76° 47′ E., on the Janagahalla, 9 miles north-east of Molakālmuru town. Population (1901), 1,796. It has become of special interest from the discovery of edicts of Asoka in the neighbourhood. They are addressed to the officials in Isila, which may represent the 'Sidda-' of Siddapura. If so, the place was in existence in the third century B.C. The other inscriptions of the place are Pallava, Hoysala, and Vijayanagar, of the eleventh, thirteenth, and sixteenth centuries.

Turuvanūr.—Town in the Chitaldroog *tāluk* of Chitaldroog District, Mysore, situated in 14° 24′ N. and 76° 26′ E., 11 miles north by east of Chitaldroog town. Population (1901), 5,035. The people are largely engaged in the weaving of blankets and cotton cloths. Dyers in red also carry on their trade. The municipality was formed in 1899. The receipts and expenditure for two years ending 1901 averaged Rs. 600 and Rs. 200. In 1903–4 they were Rs. 800 and Rs. 2,000.

[1] These numerical designations, almost invariably attached to the names of ancient divisions in Mysore, apparently refer to their revenue capacity or to the number of their *nāds*.

COORG

Physical aspects. Situation, area, and boundaries.

Coorg.—A small British Province in Southern India, a picturesque highland country, situated to the west of the State of Mysore, on the summits and slopes of the Western Ghāts, and lying between 11° 56′ and 12° 50′ N. and 75° 22′ and 76° 12′ E. Its area, by revenue survey, is 1,582 square miles. Its greatest length from north to south is 60 miles, and its greatest breadth from east to west 40 miles. The shape of the country on the map has been compared to that of an infant's knitted sock, the heel pointing north-west and the toe south-east. A narrow arm, about 12 miles long by 6 wide, projects northwards into Mysore. The plateau of Mercāra is 3,809 feet above sea-level at the fort, and may be said to extend as far as Somvārpet, 26 miles north, with an average altitude of 3,500 feet, but slopes down to the Cauvery on the east, and near Fraserpet descends to 2,720 feet. Coorg is bounded north and east by the Hassan and Mysore Districts of Mysore; and south and west by the Malabar and South Kanara Districts of Madras.

Origin of the name.

The correct form of the name is Kodagu, of which Coorg is an Anglicized corruption. It is said to be derived from a Kanarese word *kudu*, meaning 'steep' or 'hilly.' The Coorg people are called Kodagas. In the Coorg language the country is Kodavu and the people Kodavas.

Natural divisions and scenery.

Coorg proper, which occupies the whole area south of the Hatti or Hārangi river, is covered with forest, save where the clearing for a coffee plantation or other cultivation, or the open glades (*bāne*) with their beautiful greensward and varied foliage, lend a charming variety to the landscape. In vain, however, would the eye search for towns and villages, or other indications of civilized life. Only here and there in nooks and corners, ensconced among groves or clusters of cultivated trees, and betrayed by a wreath of smoke, can one discover the thatched houses of the Coorgs, who love a secluded abode near their fields. In general the summits of the hills are covered with coarse grass, the valleys with evergreen forest, and the mountain sides with woods in the hollows, through which flow streams and rivulets. But the appearance of the country varies considerably in different parts. In the vicinity of Somvārpet

in the north the hills are gently rounded, a
sloping glades interspersed with clumps of for
bling the finest park scenery in Europe. Ne
hills are closer together and more abrupt, and th
and more wild. Towards Fraserpet the coun
champaign character of the Mysore plateau,
solitary hills. In the direction of Vīrarājend
in Beppunād and Kadyetnād, the country is c
are neither dense nor high, and beautiful gr
from extensive rice valleys. The eastern fronti
Cauvery and Lakshmantīrtha rivers, presents a
terrupted jungle, deciduous in character. W
forest is evergreen, largely intermixed with ba
what is known as the Bamboo district.

Hill system.

The main range of the Western Ghāts extend
manya in the north-west to the western point
giris in the south, or for more than sixty mil
backbone several long and elevated ridges ru
east. The grand mountain mass of Subrahm
pagiri rises to 5,626 feet above sea-level; and a
ridges branching off from this part of the G
remarkable is the one which attains its greates
double-peaked Kotebetta (5,375 feet), 9 miles no
Near Mercāra the Bengunād range starts west
forming an acute angle with them. At this poin
the source of the Cauvery river, and north of it
valley through which descends the road to Ma
west coast. Continuing on the line of the Gh
south-east from here, the most prominent peak
wooded Tumbemale, Iggutappa Devarabetta
kundu, Tadiandamol (5,729 feet,) and Somam
tance to the south is the Periambadi *ghāt* road
and Tellicherry on the west coast. In the extr
lies the Marenād range, with the great later
Brahmagiris, which form the southern boundary
separating it from the Wynaad. The highest p
Davasibetta (4,500 feet), which towers up fr
plateau called Huyālemale. To the west a
points called Hanumānbetta and Perumālemal
from the Brahmagiris branch off over the whol
producing a ramification of narrow-ridged hills,
in almost solitary grandeur, like Ambatebetta
drapet, Bittangala, Kundadabetta, Siddesvarab
kalbetta, others subsiding into the undulating

eastern elevations, enclosing innumerable rice-fields, some of which are the most extensive in Coorg. The Bengunād range also extends eastwards in two ridges south of Mercāra. One culminates in the pointed peak of Nūrokkalbetta, the other takes a zigzag line towards Fraserpet, its highest point being Kallūrbetta, clothed with teak forest. From Kotebetta northwards run the Sānthalli hills, terminating in the bluff Mukribetta. From the northern frontier a range runs south to the Cauvery, in which are the fine conical peak of Mālambi (4,488 feet) and the Kānagālu hill.

River system.

The chief river of Coorg is the Cauvery, which rises at Tale-Kāveri in Brahmagiri in the Western Ghāts. It flows east-by-south across the country to Siddapur. From here it turns north-by-east and forms the eastern frontier as far as Sirangāl, where it diverges into Mysore. Its important tributaries, the Hemāvati and Lakshmantīrtha, drain respectively the north and south of the country. The Hemāvati forms the extreme northern boundary between Coorg and Mysore, and runs east into the latter. The Lakshmantīrtha rises in the Brahmagiri hills on the southern frontier, and runs north-east through Kiggatnād into Mysore. Within Coorg the Cauvery receives from the south the Kakkabe from Tadiandamol, the Kadanurhole in Beppunād, and the Kummehole in Yedenālknād; from the north the Muttarmudi, which collects the drainage south of the Mercāra ridge, and the Chikkahole, that of Horūr-Nūrokkalnād. North of Fraserpet it receives from the west the Hatti or Hārangi, into which fall the streams that drain the north-west: namely, the Kakkehole from Somvārpet, the Choranhole from Sānthalli, and the Mādapur and the Hattehole from Kotebetta. The only important stream flowing to the west is the Barapole in the south-west, which descends to Malabar. Another, called the Sārat, is said to form falls with a clear drop of 434 feet. During the monsoon months (June, July, and August) the rivers are generally in full flood, and can be crossed only with the aid of ferry-boats. After the monsoon they fall rapidly, and during the hot season are fordable on foot. They are not navigable, and are little used for irrigation, which is rendered unnecessary by the copious rainfall and the multitude of small rivulets rising in the wooded ravines.

Lakes and tanks.

There are no lakes, nor any tank of important size, but some tanks exist in the Nanjarājpatna *tāluk*. In Kiggatnād the streams in certain places form, during the rains, considerable sheets of water called *kolli*. In the hot season these dry up, leaving only a few pools here and there.

Geology. The Coorg mountains consist of the metamorphic class of rocks: gneiss, syenite, and mica schist. Near Mercāra is found clay-slate or argillaceous schist of coarse variety. Amorphous limestone occurs at Bollur near Fraserpet, sufficient for nearly all local building purposes. Along with it are found nodules of magnesite. Laterite appears sporadically in almost all parts. Iron ore occurs widely in cylindrical root-like lumps. Attention has lately been directed to the handsome purple norite, forming large hill masses in south-western Coorg, which takes a fine polish, and would be valued as an ornamental stone. The Coorg rock is an unusual type, and if it were within range of any European port would before this have been distributed as widely as the Peterhead granite. The Periambadi *ghāt* road winds through the hills of this rock, leading down in a distance of about 35 miles to the port of Cannanore, which would form a convenient centre for its distribution. It is more due to local ignorance and want of enterprise than to any intrinsic superiority on the part of foreign stone that the latter now replaces the indigenous varieties.

Botany. The flora of Coorg is typical of the prevailing vegetation throughout the Western Ghāts. The all-pervading forest is distinguished by the people as Male-kādu (evergreen mountain forest) and Kanave-kādu (deciduous forest at the lower levels of the passes). Arborescent growth at the highest elevation, 3,500 to considerably over 5,000 feet, is mostly represented by *Polyalthia coffeoides*, *Calophyllum tomentosum*, *Canarium strictum*, *Vateria indica*, *Ochrocarpus longifolius*, *Michelia Champaca*, and a host of others. On the exposed summits of the mountains are such plants as *Anagallis arvensis*, *Anaphalis* in several species, *Vernonia*, *Blumea*, and *Senecio*, each in many species. *Anemone rivularis*, *Ranunculus diffusus*, *Strobilanthes*, and *Exacum* in several species skirt the woods or *sholas*. Grasses and sedges are represented by *Arundinella agrostoides*, *Coelachne pulchella*, and numerous others. A few hardy ferns are found in the open; but in woods and on the banks of streams are *Alsophila latebrosa*, *Angiopteris evicta*, *Osmunda regalis*, *Adiantum*, *Aspidium* and *Asplenium* in many species, *Polypodium ornatum*, and many others. *Pteris aquilina* is often gregarious. Species affecting trees and rocks include *Asplenium planicaule*, *Botrychium virginicum*, and others. The club-moss (*Lycopodium phlegmaria*) is plentiful in the damp woods, on the outskirts of which orchids (*Dendrobium*, *Aerides*, *Cymbidium*, *Eria*, and others) also occur. Shrubby, climbing and herbaceous plants are everywhere abundant—*Barleria*

Gibsoni, *Memecylon edule*, *Melastoma malabathricum*, and many others. The introduced *Lantana Camara* is spreading aggressively in many parts.

Elephants range through all the wooded parts, but especially towards the eastern frontier. They are not so numerous as formerly, when periodical hunts were held. An inscription by the last Rājā states that from July, 1822, to April, 1824, he killed 233 and caught 181. They may now be killed only under licences granted by the Commissioner. Since 1902 systematic arrangements have been made in the Forest department for their capture. Bison frequent the densest forests and highest hills, especially in Marenād and Hormalnād. Tigers, leopards, and bears are not uncommon, the last being found chiefly in the north-west. The tiger-cat, black jungle-cat, and civet-cat are common, as well as the loris. Otters are found on the banks of the Hatti and other streams. The wild dog hunts in packs. *Sāmbar*, spotted deer, and barking-deer are general in woods. Monkeys include the black wanderoo, the grey Hanumān, and the brown, the last caught and eaten as a great delicacy. One of the largest birds is the hornbill. Vultures, kites, and other birds of prey are common, and parrots, pigeons of various kinds, and water-fowl abound. Peacocks are sacred, but jungle-cock feathers are much prized. Snakes are plentiful, the cobra especially haunting the bamboo tracts. The venomous black snake is found in dense forests. Crocodiles occasionally appear in the Cauvery near Rāmaswāmi Kanave. The best fish in size and quality is the lady-fish, or 'plantain fish' as the Coorgs call it. Mahseer are found in the Cauvery and other rivers: one was recently caught weighing 104 lb. Among other varieties are the black cat-fish, the black murl, the black dhok, and numerous little fishes in the paddy-fields when flooded. Insects are innumerable. The display of fireflies just before the monsoon is a sight not to be forgotten. The coffee-borer is a dreaded enemy of the planters. Leeches are a source of constant distress in the jungles, especially in the wet season. Fauna.

The climate of Coorg is temperate and humid; but those who accompanied Tipū Sultān seem to have found it trying. His historian writes:— Meteorology.

'A description of the cold here makes the pen, before it begins to write, stiff as if it were plunged into the frozen sea,—and the tongue of truth at describing the temperature is with fear and astonishment congealed like ice, notwithstanding it is covered with the posteen (fur cloak) of the lips, what can it

say therefore? . . . This, however, is the description of summer. God protect us from the winter and rainy seaso

Rainfall.

The annual rainfall at Mercāra during twenty-five years end 1901 averaged 133 inches. The wettest month is July, with inches; then June and August, with 29 inches each. Septem and October have 12 inches and 9 inches, May 6 inches, A and November 3 inches each. The other months have than one inch.

Temperature.

The temperature for the same period at Mercāra was: January, mean 67°, diurnal range 21°; in May, 73° and 1 in July, 66° and 7°; in November, 67° and 18°.

History. Kāveri.

The Purānic account of Coorg is contained in the Kā Māhātmya, which describes the origin of the river Cauv (properly Kāveri) and the country in which it rises. Kā derives her name from the *muni* Kavera, to whom she given as a daughter by Brahmā[1]. In order to bless her fa and the world, she resolved to become a river. But the Agastya saw her and asked her to be his wife. To this consented on the condition that she should be free to go if ever left her alone. One day he went to bathe in the r Kanake, forgetful of the promise, and Kāveri, left alo plunged into his holy tank and flowed forth a beautiful ri The disciples tried to stay her course, on which she went un ground. At Bhāgandakshetra she appeared again[2] and flo on towards Valamburi. Agastya, on his return, dismayed what had happened, ran after her, begging for forgiveness, imploring her to return. Loath either to change her mind grieve Agastya, she divided herself, one half flowing off as a ri the other half staying with the sage.

Chandravarma.

The Coorgs, according to this Purāna, are Ugras by desc denoting the offspring of a Kshattriya father by a Sūdra The Kshattriya was Chandravarma, the youngest son of S hārtha, king of the Matsya country. From his name and o coincidences he was probably a Kadamba prince. The dambas had as their capital Banavāsi, north-west of the My State[3]. Matsya is the name of king Virāta's city in the M bhārata, identified with Hāngal in Dhārwār. After a pilgrim to holy places in the south, Chandravarma came to Brahma

[1] Her original name was Lopamudrā, and she was brought up in palace of the king of Vidarbha (Berār), whose daughter she was reputed t

[2] The Kāveri and Kanake, of which the former runs undergroun some distance, unite at Bhāgamandala (Bhāgandakshetra).

[3] Kadambas were ruling in Manjarābād to the north of Coorg, a Wynaad to the south of it, in the eleventh century, as shown by inscrip

(at the source of the river) and propitiated the goddess Pārvatī, who bestowed on him a kingdom there and provided him with a Sūdra wife, by whom he had eleven sons. She also promised to bless the country by appearing in it as the river Kāveri. The sons, brought up as Kshattriyas, in their turn obtained as wives the hundred daughters born of Sūdra mothers to the king of Vidarbha (Berār). Chandravarma, having crowned his eldest son Devakānta as his successor, departed, predicting that Pārvatī would soon appear as the river. Each of the princes had more than a hundred sons, and they spread themselves over the country, levelling and bringing it into cultivation to a distance all round of five leagues. Their tearing up of the ground being like the work of boars, the country was called the Kroda-desa or 'boar country,' from which arose the name Kodagu.

Devakānta.

Two days before the Tulā sankramana (the time of the sun's entering the sign of Libra), Pārvatī appeared in a dream to king Devakānta, and directed him to assemble all his people at Valamburi. There accordingly the whole tribe presented themselves. The river then came rushing down the valley, and the assembled Coorgs bathed in the fresh flood. The violence of the stream twisted the knots of the women's cloths round to their backs; and the Coorg women wear them in that fashion to this day, in remembrance (says the Purāna) of the first bathing of the Coorgs in the waters of the Cauvery at Valamburi. And since that day the Coorgs assemble each year in the month of Tulā (October—November) to celebrate the great festival of their tribe in honour of Kāveri.

Gangas.

Coming to historical times, we find from inscriptions that Coorg (as well as Bayalnād or Wynaad) in the ninth and tenth centuries was included in the kingdom of the Gangas, whose capital was at Talakād on the Cauvery in the south-east of Mysore, and who ruled over the Mysore country from the second century to the eleventh[1].

Changālvas.

Under them were the Changālvas or kings of Changa-nād, who later called themselves the kings of Nanjarāyapatna or Nanjarājapatna. This place lies north of the Cauvery in Coorg, near the point where the river becomes the common boundary of Coorg and Mysore, and still gives its name to the northern *tāluk* of Coorg. The Changālvas first appear in connexion with Pana-

1 The adjoining State of Punnāta (occupying the south-west of Mysore District), whose capital was Kitthipura (now Kittūr on the Kabbani), can be traced back to the fourth century B.C., and is mentioned by Ptolemy in the second century A.D. It was subsequently absorbed into the Ganga kingdom.

soge or Hanasoge, south of the Cauvery in the Yedatore *tāluk* in Mysore. Their territory included the Hunsūr *tāluk* in Mysore, as well as the east and part of the north of Coorg. Their inscriptions have been found in both Yedavanād and Bettyetnād. They were originally Jains, and their priests claim exclusive authority over the Jain temples from Hanasoge to Tale-Kāveri, which perhaps indicate the limits of the kingdom east and west.

Cholas. The Ganga power was overthrown by the Cholas from the Tamil country who captured Talakād at the beginning of the eleventh century, and claim to have conquered among others the Kudu (or Coorg) country. The Changālvas now became feudatory to the Cholas, who, in accordance with their usual policy, imposed upon them Chola names. Nanni Changālva, with the prefix Rājendra Chola, seems to have been an important king in the eleventh century.

Kongālvas. North of the Changālvas were the Kongālvas, who during the eleventh century ruled over the Arkalgūd *tāluk* in Mysore and the Yelusāvira country in the north of Coorg, under the Cholas. They also were Jains, and their kingdom may previously have been called Kongal-nād.

Hoysalas. The Cholas were expelled from Mysore early in the twelfth century, when Talakād was retaken by the Poysalas or Hoysalas, who had been rising to power in Mysore since the Ganga kingdom came to an end. Their capital was Dorasamudra (Halebīd in Hassan District), but they originally came from Sosevūr, in the Western Ghāts, identified with Angadi in the Mudgere *tāluk* of Kadūr District. They bore the title of 'champion among the Malapas' or hill chiefs. An inscription in Coorg of 997 mentions four Malapas. But the former may have included the Danāyaks of Kote or Bettadakote on the Gopālswāmi hill in the south of Mysore District, who claim at about this time to have overrun a territory extending from Davasibetta (the southern point of Coorg) in the south to Goa in the north, and from Satyamangalam (on the Bhavāni in Coimbatore) on the east to the Bisale *ghāt* (the north-west of Coorg) on the west. These limits evidently embrace Coorg. But the power of these Danāyaks soon came to an end, as well as that of the Kongālvas.

Between the Hoysalas and the Changālvas, however, several fights took place before the latter were subdued. They claimed, equally with the Hoysalas, to be Yādavas and of the Lunar race, and held out for independence when their overlords the Cholas had been removed. By 1145 the Hoysala king Nārasimha I had slain the Changālva ruler in battle, and captured his

elephants, horses, gold, and new jewels. After this the Changālvas appear to have retired into Coorg, for in 1174 Ballāla II sent his general Bettarasa against them in Pālpare, a fort whose ruins are at Hatgatnād in Kiggatnād. The Changālva Mahādeva was crushed, and Bettarasa built a city there as his seat of government. But Changālva Pemma-Vīrappa, joined by Būdaganda Nandideva, Udeyāditya of Kurache, and others, 'the Kodagas of all the *nāds*,' marched against Pālpare and attacked Bettarasa, who seems to have got the worst of it at first, but was finally victorious. This is the earliest express mention of the Coorgs by name that has been met with in inscriptions. The subjection of the Changālvas after this seems to have been complete, and in 1252 the Hoysala king Somesvara paid them a visit at Rāmanāthpur (to the north of the Cauvery in the Arkalgūd *tāluk*). Their capital was then Srīrangapatna (known as Kodagu Srīrangapatna), south of the Cauvery near Siddapur. During this period the Changālvas, like others of the old Jain rulers, had changed their religion and adopted the new Lingāyat creed established in the twelfth century. Their family deity now was Annadāni Mallikārjuna on the BETTADPUR HILL (in the Hunsūr *tāluk*), which they called Srīgiri.

To the Hoysalas succeeded the Vijayanagar empire in the fourteenth century, and the Changālvas passed under its supremacy. They were among the southern principalities controlled by the viceroy at Seringapatam called the Srī Ranga Rāyal. In the beginning of the sixteenth century Nanja Rājā founded their new capital of NANJARĀJAPATNA. In 1589 Piriya Rājā or Rudragana rebuilt Singapatna and named it after himself PIRIYĀPATNA, the Periapatam of the English histories. After the power of Vijayanagar had been broken by the Muhammadans in 1565, the authority of the viceroy began to decline. In 1607 he endeavoured to anticipate events by confirming the Malalavādi country (Hunsūr *tāluk*) to Rudragana, in order that the worship of the god Annadāni Mallikārjuna should not fail as long as the Nanjarājapatna kings of the Changālva family continued. But in 1610 the viceroy had to withdraw in favour of the Mysore Rājā, who took possession of Seringapatam and made it his capital. And in 1644 Bettadpur and Piriyāpatna were captured by Mysore. The king Nanjunda Rājā had retired from the world, but his son Vīra Rājā fell in the defence of his capital, after putting to death his wives and children on seeing that his situation was desperate, and the rule of the Changālvas was at an end. Vijayanagar.

Firishta states that at the end of the sixteenth century Coorg

proper was governed by its own chiefs, called Naiks admitted the supremacy of Vijayanagar; but they se have been often at feud with one another. Accordi tradition the country was divided into twelve *kombu* thirty-five *nāds*. The conquest of the Changālvas by M was not followed up by the acquisition of Coorg. Acc to the native history, the Mysore army advanced to Pālpa was there defeated with great slaughter. But as the ev placed in a reign some thirty years later, the statement not entitled to credit. Mysore had enough to do elsewh defend itself against Sivappa Naik of Bednūr, who was running all the west, and in 1646 even laid siege to Se patam, ostensibly for the purpose of restoring the autho the fugitive Vijayanagar king who had taken refuge with The way thus lay open for occupation by some one of th Changālva territory in Coorg.

Hāleri Rājās.

This was effected by a prince of the Ikkeri or Bednūr fa who settled at Hāleri, north of Mercāra, in the garb of a gama or Lingāyat priest, but ended by bringing the country under his authority[1]. His descendants continu Rājās of Coorg till 1834. Their history to 1807 is tained in the *Rājendranāme*, compiled in Kanarese unde orders of Vīra Rājendra, the most distinguished of the line translated for him into English by Lieutenant Abercrom 1808 at Mangalore. But the earlier dates, for some po reasons, have been distorted.

Muddu Rājā.

Muddu Rājā removed the capital to Madikeri or Me where he built the fort and palace in 1681. Of his three Dodda Vīrappa, the eldest, succeeded him at Mercāra, Appāji Rājā and Nanda Rājā, the second and third, settl Hāleri and Horamale. When in 1690 Mysore under Ch Deva Rājā invaded the Belūr territory, which included Ma ābād, Dodda Vīrappa seized the Yelusāvira country for C He was allowed to keep this on paying half the reven Mysore, whence it came to be called Itterige, or 'paying t two parties.' He also, by assisting the Chirakkal Rājā ag Somasekhara Naik of Bednūr, gained the district of A Sulya on the north-west. He died in 1736, at the ag seventy-eight. His only son had lain in prison for tw years until his death in 1729. But Chikka Vīrappa, the of the latter, who was imprisoned with him, had been appoi to succeed to the throne, and was now placed on it. Du his reign Haidar Alī rose to power in Mysore, and, afte

Chikka Vīrappa.

[1] It is not unlikely that he was in some way related to the Changāl

conquest in 1763 of Bednūr and its territories, considered himself the liege lord of Coorg. But he first claimed Yelusāvira, and then granted Uchingi to Coorg in consideration of a payment of 3 lakhs of pagodas.

Muddu Rājā and Muddaiya.

There being no heir to Chikka Vīrappa the succession passed to the two other branches, and Muddu Rājā and Muddaiya, representing the Hāleri and Horamale branches, ruled together in harmony. Haidar, having held back from his promised cession of Uchingi, was forced to give up Panje and Bellāre instead. The joint kings died in the same year, 1770. Muddu Rājā left a son Appāji, whom his father's brother Linga Rājā wished to place on the throne, but Muddaiya's son Mallaya put forward his own son Devappa Rājā, who was accepted. On this, Linga Rājā fled to Haidar for help, taking with him his son Vīra Rājā and his nephew Appāji. Haidar was too much occupied in opposing the Marāthās to do anything immediately. But on their retirement, Linga Rājā was sent with an army, and, being joined by many Coorgs, marched without opposition to Mercāra, the capital[1]. Devappa Rājā sought refuge with the Chirakkal Rājā of Kote, but meeting with a poor reception, fled north in disguise, with only four attendants. He was captured at Harihar and sent to Seringapatam, where his family already lay in prison, and was put to death together with them. This was the end of the Horamale branch. Haidar now offered Coorg to Linga Rājā on condition of paying tribute, and allowed him to occupy a part of Wynaad, at the same time depriving him of Amara Sulya, Panje, Bellāre, and Yelusāvira. On Linga Rājā's death in 1780, Haidar assumed entire possession of Coorg, under pretence of being guardian to his sons until they should come of age. Meanwhile they were to reside at the fort of Gorūr, on the Cauvery, in the Arkalgūd *tāluk* of Hassan District of Mysore. A former Brāhman treasurer of the Coorg Rājā was appointed governor, and a Musalmān garrison held the Mercāra fort.

Devappa Rājā.

Linga Rājā.

The Coorgs were greatly incensed at the abduction of their princes from the country, and at Brāhmans lording it over them. They therefore broke into rebellion in June, 1782, and drove out the Musalmāns. Haidar was engaged in war with the British in the Carnatic, and his death soon after prevented

[1] Wilks's account is that, in order to open a direct route to Malabar, Haidar suddenly invaded Coorg, and offered a reward of 5 rupees for each head brought before him. After about seven hundred had been paid for he was struck with the handsome features and relented, ordering the decapitation to cease.

immediate retribution; but Tipū Sultān, his son, was fully determined on the reconquest of Coorg. He removed the family of the Coorg Rājās to Piriyāpatna, and when he had retaken Nagar, and reduced Mangalore in 1784, marched through Coorg to Seringapatam. After denouncing the Coorgs as guilty of polyandry, and for their rebellions, he said he would forgive them this once, but if they rebelled again he vowed that he would honour every man with Islām and banish them from their country. Scarcely had he left when they again took up arms in 1785 and repossessed themselves of their native hills. A force sent to put them down was driven back, on which Tipū himself marched to Coorg with an army. Having allured most of the Coorgs to meet him at Tale-Kāveri, under pretence of peaceable intentions and conciliatory measures, he suddenly seized them, and, hunting out their families, drove them, altogether about 70,000 souls, like a herd of cattle to Seringapatam, where all the males were forcibly circumcised. Coorg itself was partitioned among Musalmān landlords, to whom the slaves of the country were made over, and additional labour provided from Adoni in Bellary District. The only condition laid on the new owners was that they were to search out and slay all such Coorgs as might have escaped his vengeance, as he was resolved on their extermination. The country was held by garrisons in four forts, at Mercāra (Jāfarābād), Fraserpet (Kushālnagar), Bhāgamandala, and Beppunād; and on account of the accessions he had made to the faith, Tipū now assumed the title of Bādshāh.

Vīra Rājendra.

Such was the state of affairs when in December, 1788, Vīra Rājā or Vīra Rājendra Wodeyar, accompanied by his wife and his two brothers Linga Rājā and Appāji, effected his escape from Piriyāpatna, after a confinement of six years. The Coorgs rallied round him, and before long he had possessed himself of the whole country; the large force sent against him by Tipū being diverted to the western coast owing to a revolt of the Malayālam Rājās. The British, foreseeing the strategical value of Coorg in the impending struggle with Tipū, now entered into treaty with Vīra Rājā, who was sorely in need of a powerful ally. Tipū in vain strove to entice him back. Vīra Rājā assisted the Bombay army on its march to Seringapatam with supplies, procured by wholesale plunder of the neighbouring territories. On the night in February, 1792, when Lord Cornwallis drove Tipū back into Seringapatam and the British occupied the island, 5,000 Coorgs who had been carried away by Tipū with their wives and children, alto-

gether some 12,000 souls, made their escape in the confusion and regained their native country. Tipū was forced to agree to the terms offered by the British, one of which was the surrender of half his dominions adjacent to the Company's possessions. Coorg was in danger of being sacrificed, but the Governor-General demanded its cession also, in order to save Vīra Rājā from Tipū's vengeance. So enraged was Tipū at this, that he was about to break off the treaty, saying—'To which of the English possessions is Coorg adjacent? Why do they not ask for the key of Seringapatam?' But he was forced to give way, and Coorg remained a firm friend of the British. On the spot where the Rājā had first met the British commander, General Abercromby, he founded Vīrarājendrapet, now the second place in Coorg. Tipū made more than one futile attempt to get him assassinated. In 1796, having no son, he married a second time. In the final war with Tipū the Rājā again rendered effectual aid in supplies and transport to the Bombay army. He was witness of the British defeat of Tipū at Siddesvara, and his own forces laid waste the enemy's possessions around Coorg in the Tulu and Mysore countries. On the fall of Seringapatam in 1799 he received some of the trophies, but was disappointed in not being allowed to retain the Piriyāpatna country. He obtained, however, Panje and Bellāre in South Kanara. Though he had daughters by his second marriage he still had no son. In 1807 his wife died, and his hopes of an heir were extinguished. His mind was unhinged, and he became subject to paroxysms of sanguinary rage, in which he ordered executions and massacres for which he was filled with remorse when he recovered. He had surrounded himself with an African body-guard, who were ready executioners, and eunuchs from Mysore had charge of the female apartments. But the guards of the palace and the military officers were Coorgs. These, no longer able to bear the yoke, conspired to put him to death. But having got warning of it at the last moment, he with great presence of mind, as Haidar had done on a similar occasion, placed the bolster in the bed covered with a blanket and got out of the way. The conspirators rushed in and cut at what they mistook for the sleeping Rājā, and were paralysed to find he had escaped. He at once summoned his African Sīdīs, and shutting the fort gates, en-trapped three hundred Coorgs, who were massacred to a man, the Rājā himself shooting down twenty-five from a window. He was now in fear that he might lose the good opinion of the English. He wrote to the Governor-General informing him of

the death of his Rānī, and of hi
to the throne settled on his four
in order of their seniority; but a
Feeling that his end was appr
concern for the safety of his d
sent executioners to put his two
to himself again, he dispatche
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younger one, but were in tim
Resident in Mysore (the Ho
Coorg to report to the Goverr
confirming the crown in the fe
Surgeon (Dr. Ingledew) attende
his mental malady, which was
suicide. At length, on June 9,
Devammāji. daughter Devammāji, gave his se
after expired. Devammāji, thou
ledged as Rānī of Coorg, and th
to the late Rājā's daughter by hi
Dīwān.

Linga Rājā. Meanwhile Linga Rājā gaine
his claim as regent instead of th
to retire to his own country.
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Coorgs, the next step was that L
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should come of age, but sent
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he had permanently assumed t
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Madras in the name of Devammā
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Devammāji and regent of Coo
aged forty-five. He was not war
for he strengthened all the fo
systematic survey of the lands;
to a state of abject slavery by a
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wife, full of fear for her future
buried with him.

Vīra Rājā. His son Vīra Rājā, who was ab

His first act was to put to death all who had displeased or thwarted him in his father's lifetime. One Channa Vīra escaped to Mysore, but was arrested and sent back on Vīra Rājā's application for him as an escaped criminal. The Rājā was grossly sensual and most sanguinary in his rule. In 1826 the Resident in Mysore visited Coorg in order to inquire on the spot into the continual executions that took place, but was studiously misled. In 1832 a Coorg named Channa Basava, and his wife, the Rājā's sister[1], escaped to him for refuge, and implored the protection of the British. The Rājā demanded that the fugitives should be delivered up to him, which was refused, and the Resident again went to Coorg to confer personally with the Rājā. He found him much changed since the last visit, and ill at ease, owing to treasonable projects in which he had been engaged. The Resident left him with a hint that disobedience to the orders of the British Government might be punished with deposition[2]. But the Rājā did not reform. Devammāji, the daughter of Vīra Rājendra, was murdered, as well as all surviving members of the families of his predecessors. As his disaffection openly increased, it was proposed to quarter troops near Mercāra, but the British Government was unwilling to go to extremities. The Rājā, however, precipitated events by insolent letters to the Governor of Madras and the Governor-General. The latter, Lord William Bentinck, therefore ordered a British force to Coorg in 1834 to depose him. On this he issued an abusive proclamation against the British. The force, which marched in four columns from different sides, met with little serious opposition at most of the stockades, and entering Mercāra, hoisted the British flag there on April 6. The Rājā, who had retired to Nālknād with his women and treasures, had not the courage to face the invaders.

End of t Coorg Rājās.

On April 11, Colonel Fraser, the Political Agent with the force, issued a proclamation that 'the rule and dominion of Rājā Vīra Rājendra Wodeyar over the country of Coorg had now definitively and for ever ceased.' The Coorgs breathed freely when they found that he was not to remain in the country, and unanimously voted to be placed under the British Government. The annexation was accordingly proclaimed on May 7, 1834. The Rājā was deported to Vellore, and was subsequently allowed to live at Benares. In addition to his pension, he demanded the payment to him of the capital, originally the

[1] She survived till lately, and died in 1903 at the age of ninety-four.

[2] There was the example of Mysore before him, where the Rājā had been recently deposed for his persistent misrule.

inheritance of Devammāji, of which the interest had continued to be paid to the Coorg Rājās. In 1852 he obtained leave from Lord Dalhousie to visit England with his favourite daughter Gauramma, then ten years old, in order to give her a European education. Arrived there, he expressed a wish to have her brought up in the Christian faith. Queen Victoria took an interest in the Indian princess, and at her baptism, on June 30, 1852, stood sponsor through the Archbishop of Canterbury, and gave her the name Victoria. Feeling himself strong in the royal favour, the ex-Rājā commenced a Chancery suit against the East India Company for the recovery of nearly 7 lakhs invested for Devammāji, as previously described. The suit dragged on a weary course till in 1858 the Government of India was transferred to the Crown, and his suit failed. The Coorg princess was carefully brought up, and eventually married to a British officer, but the union was not a happy one, and she died in 1864. Her husband and child afterwards mysteriously disappeared, and were never heard of again. Vīra Rājā had died the year before, and was buried in Kensal Green cemetery in London.

British period.

A pretender named Vīrappa had appeared in 1833, who professed to have escaped when the other members of the family were destroyed in 1820. After the annexation, under the guise of a *sannyāsi* named Abhrāmbara, he carried on intrigues which at the time of the rebellion led to his arrest and detention in jail at Bangalore. He died in 1870. The so-called Coorg rebellion of 1837 was a rising of the Gaudas, who occupy the western slopes of the Ghāts and resemble the Coorgs in many of their habits. Their grievance was that in the districts of Amaṛa Sulya, Puttūr, and Bantwāla, which by the wish of the inhabitants had been re-transferred to Kanara, they were required to pay in cash the assessment which they had been paying in kind according to the custom in Coorg, thus driving them into the hands of the money-lenders. A riot took place at Mangalore, where the prisoners in jail were let out, the offices and some civilians' houses burnt and looted. A rising of the Coorgs had also been planned, and the pretender gave out that a great prince of the Hāleri house was about to take possession of his inheritance. But the whole thing was soon brought to an end by the Coorgs themselves, and the loyal tribesmen received rewards and the Coorg medal. In 1861, after the Indian Mutiny, the Coorgs for their loyalty were exempted from the Disarming Act.

Under the freedom of British rule Coorg has prospered.

To its connexion with Mysore it doubtless owes its recognition as a separate Province under the Government of India. The Commissioner of Mysore was also appointed Commissioner of Coorg; and an officer of the Mysore Commission, with the title of Superintendent of Coorg, had his head-quarters at Mercāra, except during the monsoon, when they were at Fraserpet. In 1869 the Commissioner was styled Chief Commissioner, and the Superintendent of Coorg afterwards became Commissioner. On the rendition of Mysore to the Native Government in 1881, the Chief Commissioner became Resident in Mysore and Chief Commissioner of Coorg.

Recent events.

In the recent history of Coorg the most material change has been brought about by coffee cultivation. Probably introduced by Moplahs near Nalknād, who concealed their success, it was encouraged by Captain Le Hardy, the first Superintendent of Coorg, so that most native houses had a few plants. But when Europeans took it up, it soon became the main industry of the country. The first European plantation was opened at Mercāra in 1854. Others followed in different parts, and by 1865 there was a general rush, in the belief that coffee-planting was a sure and easy road to fortune. Lands were to be had, either from Government for the mere asking, or by purchase from native holders. Fine forests fell under the planter's axe. Lakhs were spent in expectation of a cent. per cent. return. But in this too rapid extension losses by the attacks of certain insects and other natural enemies had to be contended with. Nevertheless a considerable body of European planters had been established throughout the country. Coorgs, too, entered into the race for wealth. The demand for labour completely freed men formerly enslaved, and also attracted thousands of coolies from Mysore and other parts. In short, the whole aspect of the country underwent a change. Of late years, though the coffee is as productive and good as ever, the great fall in price, due to the competition of Brazil, has caused deep depression. Many Europeans and natives have been impoverished, and numerous coffee estates abandoned. The year 1897-8 was very unhealthy on account of fever, and several prominent Coorg officials died. Though famine is unknown in Coorg, a short rainfall, and exhaustion of the usual reserve stock of grain, caused distress in parts of the south in the closing months of 1900. The Madras regiment stationed at Mercāra was withdrawn in 1883; and a regiment of Coorgs was enrolled in 1902 as an experiment, but was not satisfactory and has been disbanded.

Archaeology. Cairns. Cairns containing kistvaens exist in various parts. Some have been opened at Arameri in Beppunād, near Vīrarājendrapet, and near Fraserpet. They contain the pottery usual in them elsewhere; and some red carnelian beads, with straight or zigzag parallel lines scratched on them, filled in with white, as well as iron implements, with spear and arrow-heads, all very much corroded, have also been found. The structures are called Pāndu-pare, 'dwellings of the Pāndus,' by the Coorgs. No existing people claim to have any connexion with them.

Kaimadas. The Coorgs have near their houses a small square building or shrine called Kaimada, in which they keep silver plates with images of men and women in Coorg costume chased on them. These represent ancestors, whose departed spirits are annually worshipped. Kadangas. Other ancient Coorg remains are the Kadangas or war-trenches, which stretch over hills, woods, and dales for miles, in some places branching off in various directions or encircling hill-tops. No doubt they also formed boundaries between the *nāds*. Some are nearly 40 feet from summit to bottom of ditch, and are often taken along hill-sides with an angle of 80° to the horizon. An inscription of A.D. 887 mentions the Penne *kadanga*, and one of A.D. 977 the 'new trench.' They were therefore in existence in the Ganga period. It has been noticed that they resemble earthworks of the ancient Britons, who sank one or more deep trenches round the summit of a hill, and raised lofty banks with the excavated soil. This is the most ancient species of rampart known, and existed ages before the use of mural fortifications.

Epigraphy. The inscriptions of Coorg have been translated and published in the Mysore Archaeological series named *Epigraphia Carnatica*. Though not numerous, they are of interest and importance, especially the early ones. They relate to the Gangas, Hoysalas, Changālvas, Kongālvas, and Coorg Rājās.

Architecture. Of architectural monuments the tombs of the Rājās near Mercāra are the principal, built in 1809 and 1821. They are square buildings, much in the Muhammadan style, on well-raised bases, with a handsome dome in the centre, and minaret-like turrets at the four corners, surmounted by *basavas* or bulls. On the top of the dome is a gilded ball, with a vane, and all the window frames are of handsomely sculptured syenite, with solid brass bars. The palace at Mercāra, of about the same period, is also of interest, though alterations have been made to fit it for its present uses.

Population. The table on the next page shows statistics of the population of Coorg as returned at the Census of 1901.

Tāluk.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Mercāra . . .	216	1	56	28,620	132	− 16.0	Details not available.
Nanjarājpatna .	355	3	280	42,720	120	− 1.5	
Pādinālknād .	400	...	57	28,620	72	+ 1.4	
Yedenālknād .	201	1	52	43,412	215	+ 20.1	
Kiggatnād . .	410	...	68	37,235	91	+ 12.8	
Total	1,582	5	513	180,607	114	+ 4.4	14,067

The density of the population is 114 persons to the square mile; but if the area of forests be excluded it rises to 184, that for Mysore being 185. Density.

The urban population is 8.4 per cent. of the whole. Five places are classed as towns, of which only two, Mercāra (population, 6,732) and Vīrarājendrapet (4,283), are entitled to be so called. The other three, Somvārpet (1,745), Fraserpet (1,600), and Kodlipet (889), are scarcely more than villages, but are reckoned towns as being municipalities. The urban population has declined in each decade since 1881, by 6.8 per cent. in 1891, and 1.7 per cent. in 1901. The general cause is the falling off in the coffee-growing industry; but in the case of Mercāra the decrease between 1881 and 1891 was partly due to the withdrawal of the regiment that used to be stationed there. The only towns that show a small increase are Somvārpet and Kodlipet. There are 513 inhabited villages. But except in the Nanjarājpatna *tāluk*, villages in Coorg are merely areas convenient for administrative purposes. The people mostly live in separate homesteads wide apart, as in the Malnād of Mysore. The average population of a village is only 345. The towns have markets and are centres of trade, but the villages are entirely rural. The number of occupied houses per square mile has risen from 14 in 1881, and 17 in 1891, to 19 in 1901. Correspondingly the occupants per house have fallen from 7.98 in 1881, and 6.45 in 1891, to 5.91 in 1901. The average number of occupants per house is higher in the villages than in the towns, being 6.02 in the former to 4.96 in the latter. This is due to the Coorg custom of all the several branches of a family living under the same roof. But the tendency is increasing for the families to subdivide and live separately. Towns and villages.

The total population at each Census has been as follows: (1871) 168,312, (1881) 178,302, (1891) 173,055, and (1901) Growth of population.

180,607. The increase in the earliest decade shows that Coorg was not affected by the famine of 1876–8. The variations in the other periods are chiefly due to a cause special to Coorg. In 1881 the coffee crop was late, and the estate coolies who were picking it therefore remained longer than usual and were included in the Census. In 1891 they had mostly returned to their own countries before the Census was taken. In 1901, again, the crop was a heavy one, and the coolies in consequence were then also mostly on the estates at the time of the Census. There are no separate statistics of immigration or emigration, so that these disturbing factors cannot be accurately eliminated. But from the tables of birthplace it has been estimated that the settled population increased by 4·5 per cent. in the decade ending 1901, and the immigrants by 4·1 per cent. If this be the case, the general result is not greatly affected. The Coorgs proper increased by 10·7 per cent. between 1891 and 1901, compared with 20·6 per cent. between 1881 and 1891. They therefore multiplied faster than the general population, but not so fast as before. This is an index to the check on the prosperity of the country due to the decline in the coffee industry.

Migration. At the Census of 1901 there were 55,098 persons in the Province who had been born out of it, and 3,184 who had been born in it were registered elsewhere in India. Of the latter, 2,553 were in the neighbouring State of Mysore.

Age statistics. The percentage distribution of the total population of each sex under different age-periods is as follows: Age 0–5, males 9·5, females 12·3; 5–15, males 32·6, females 39·1; 15–40, males 50·6, females 44·7; 40–60, males 14·4, females 12·9; 60 and over, males 2·4, females 3·3. The following anomalies present themselves. There are more males of the age 25–30 than in any other quinquennial period, and this has been the case in each previous Census. It is due to the fact that a large proportion are male immigrant coolies in the prime of life. Females, on the other hand, have been most numerous up to age 9. Fewer females therefore are immigrant labourers.

Vital statistics. The following table of vital statistics is based on the published figures, but the results are likely to be misleading. It must be borne in mind that Coorg is visited at certain seasons of the year by thousands of coolies, who remain only a few months. They are specially liable to sickness, and the men are not generally accompanied by their wives, these facts accounting for both the high death-rate and the low birth-rate.

Year.	Population under registration.	Ratio of registered births per 1,000.	Ratio of registered deaths per 1,000.	Deaths per 1,000 from			
				Cholera.	Small-pox.	Fever.	Bowel complaints.
1881	178,302	15.86	17.90	...	...	15,66	...
1891	173,055	20.31	21.84	...	0.44	...	...
1901	180,607	18.83	36.49	0.32	2.49	28.69	1.21
1904	180,607	21.98	26.62	...	0.09	22.45	0.49

Diseases. There were 42,641 patients treated in the Government hospitals and dispensaries in 1904, of whom 58 per cent. were men, and the remainder women and children in about equal proportions. Of the diseases under treatment malarial fevers accounted for 18 per cent., and skin diseases for 15 per cent. Other common diseases were worms, rheumatic affections, and anaemia. Of local diseases the greater number of cases were complaints connected with the digestive system, lung diseases, and diseases of the spleen.

Plague. Plague invaded the Province in 1903, breaking out at Vīrarājendrapet in May, at Gonikoppal in September, and at Sirangala in December. Altogether there were 105 seizures and 45 deaths. The disease then disappeared in the former parts, but broke out again in 1904 at Fraserpet, where there were altogether 35 seizures and 19 deaths.

Infant mortality. The following table shows the number of children of either sex to 1,000 of the same sex at each of the last three Census periods. The last decade was more fatal up to age 5 than the previous one, but was better than the decade ending 1881:—

Age.	1881.		1891.		1901.	
	Male.	Female.	Male.	Female.	Male.	Female.
0–5	84	113	111	146	95	123
5–10	111	142	115	139	112	139

Sex statistics. The number of females to males in 1901 was as 801 to 1,000. This is the effect of the presence in the country of a number of male immigrant labourers. In 1891 the proportion was 804 (probably so high because, as has been stated above, the immigrant coolies had left before the Census), in 1881 it was 775, and in 1871 it was 782. The increase since 1881 may be due either to more women coming into Coorg with the coolies than before, or to the enumeration of the sexes being more correct. Except among Christians, the proportion of

women is lowest in all religions between the age showing that few of the immigrant labourers are Chr Females are also fewer in proportion to males among māns than under any other religion, the reason probabl that the Muhammadans are largely traders, who ha brought their wives with them. Taking the two classes are specially the permanent inhabitants of Coorg, and other country, it is found that among the Kodagas or proper there are 979 females to 1,000 males, and amo Yeravas 942. The only caste or sect of any strength in the females preponderate over the males is that of the yats, among whom there are 1,038 females to 1,000 male

Civil condition.

Taking the statistics as they stand, Coorg exhibits the characteristics as other Indian Provinces: namely, universal marriage, marriage at early years (especially girls), and a high proportion of widows to widowers. Coorg 34 per cent. of the males and 11 per cent. o females over 15 years of age are unmarried, less than cent. of the boys and 2 per cent. of the girls under married, and there are only 285 widows to every 100 wid This last result must be due to the large number of male grants who are not accompanied by their women depen Men of over 30, and women of over 20, are with few e tions married. Girls are generally married between the of 15 and 20, and youths before they are 25. The Koda Coorgs proper do not marry so universally or so you other Hindus, and widow marriage is allowed to a conside extent. For 37 per cent. of their males and 19 per cent. of females over 15 years of age are unmarried, while only 3 1,000 males and 325 in 1,000 females are married, agains and 378 in the whole population. In the total popul there are only 764 wives to 1,000 husbands, and amon Musalmāns only 593.

Languages.

The language most in use, and the official languag Kannada, the Karnāta or Karnātaka of the *pandits*, an Canarese of European writers. It is spoken by 42 per ce the population. Next to this comes Kodagu or the C language. This is spoken by 22 per cent. and by others Coorgs, for 39,148 persons have returned it as their p tongue, although the number of Coorgs by race is only 36 One of the castes using it is the Ayiri caste of artisans. increase in the number of people who speak the langua 10 per cent. for the decade, or nearly the same as the ra increase in the Coorg race. The Kodagu or Coorg lang

is a dialect of Hala Kannada or Old Kanarese, midway between that and Malayālam. It has no written character or literature, but is written in Kannada or Kanarese letters, and has a number of ballads or chants (*pāttu*). A Coorg Grammar was published for the first time in 1867, by Major Cole, then Superintendent of Coorg; and some specimens of Coorg songs, with an epitome of the Grammar, were published by the Rev. A. Graeter at Mangalore in 1870. The other distinctive language of Coorg is Yerava, a dialect of Malayālam, spoken by 7 per cent. of the population, who are chiefly members of the hereditary servile class of that name. Tulu, the language of South Kanara, is spoken by 7·2 per cent. Other languages include Hindustāni, Tamil, Telugu, Marāthī, and Konkanī. Among jungle tribes, Kurumba, a dialect of Kanarese, is spoken by 2·3 per cent.

Race, trit and caste.

The two distinctive classes special to Coorg are the Kodagas or Coorgs proper, from time immemorial the lords of the soil, and the Eravas or Yeravas, their hereditary praedial slaves, now of course free. The Kodagas number 36,091, or 20·5 per cent. of the population, and the Yeravas 14,586, or 8 per cent. more; but associated with these two are certain other Coorg classes which bring up the whole number to 53,945, or altogether 29·3 per cent. The Kodagas form a distinct highland clan, free from the trammels of caste, and as a rule resent Brāhman intervention. Their physical characteristics and manly bearing, combined with a picturesque dress, have always attracted the attention of Europeans; and scientific investigation has now shown that ethnographically they are a superior race[1]. Totally distinct in general appearance and in bodily measurements are the Yeravas, many of whom still live in a very wild state in the jungle, while others have enlisted as coolies in coffee plantations. The Coorg is taller than the Yerava, has a finer nose, a larger head with a distinct tendenc towards brachycephalism, and a more perfect approach t orthognathism. Apart from anthropometrical results whic can be expressed in figures, we have the contrast of colo between the fair (light-brown) Coorg and the very da skinned Yerava. The hair of the former is straight, while t of the Yerava is distinctly wavy, and the broad nose of latter is accompanied by thick, slightly averted, lips. Coorgs and Yeravas thus belong to two distinct ethnic t The latter tribe falls into a group with the Kurumbas, J

Koda

[1] See T. H. Holland, *Journal of the Asiatic Society of Bengal*, fr Part iii, p. 59 ff.

Paniyans, and Kadirs, who are the South Indian cousins of the Kols and Gonds. These somatic characters of the Coorgs mark them off with unmistakable distinctness from the other races who speak Dravidian languages, but leave the question of their ethnic relationship an unsolved problem. According to one theory they are the southernmost extension of a Scytho-Dravidian type which prevails throughout the West of India. As the Coorgs are said to be Ugras, one is tempted to see a possible connexion with the founder of the Sāntara kingdom at Pomburchha or Humcha in the Shimoga District of Mysore, who claims to be of the Ugra stock, and to have come from the Northern Muttra. The *Mangarāja Nighantu* of 1398 describes the Kodavas and Kodagas as Mlechchas, which implies that they were foreign and anti-Brāhman.

Dress.

The full dress of a Coorg consists of a long coat (*kupasa*) of dark-coloured cloth, open in front and reaching below the knees. The sleeves end below the elbow, showing the arms of a white shirt, now generally of the English pattern. The coat is folded across, and confined at the waist by a red or blue girdle, wound several times round, and knotted on the left front. On the right front the Coorg short knife (*picha katti*) is stuck into the girdle, having an ivory or silver handle or hilt and fastened with silver chains. The large broad-bladed waist-knife (*odi katti*) is now more rarely worn. Its place is at the back, where it is carried in a brass clasp, parallel with the waist, with its point directed towards the left shoulder. Like the *kukri* of the Gurkhas, which it resembles, it was a formidable weapon in hand-to-hand fighting. It is now used only as a test of skill and strength on festive occasions, as when a bridegroom is expected to cut through the trunk of a thick plantain tree at one stroke. The head-dress is a red kerchief, or the peculiarly fashioned turban, large and flat at the top and covering a portion of the back of the neck. The dress of the Coorg women consists of a white or light-blue cotton jacket, with long sleeves, fitting tight and closed up to the neck. The skirt is white muslin or blue cotton stuff, wrapped several times round and tied at the waist by means of a string. One end is brought over the bosom and knotted on the right shoulder. The other end, gathered into folds, is worn, contrary to the usual fashion of Hindu women, at the back. The head is covered with a white muslin or coloured kerchief, one end of which encircles the forehead, and the two corners are joined together at the back, allowing the ends to fall over the shoulders.

The houses are generally situated close to rice-fields, on a sheltering slope of *bāne* land, surrounded by clumps of plantains, sago and areca-nut palms, and other fruit-bearing trees. A coffee garden and a small vegetable plot are seldom absent; and where the locality is favourable, a little tank well stocked with fish is not uncommon. The position, style of building, and approaches of old Coorg houses strongly remind one of small fortifications. A deeply cut passage, paved with rough stones and overgrown with shady trees, its sloping side walls decked with a variety of luxuriant ferns, leads in angular lines to the doorway, passing under an outhouse. Through a paved courtyard, enclosed on three sides by stables, storerooms, and servants' quarters, one passes to the front of the main building, which is square, of one storey, and raised about three feet above the ground. All the buildings are roofed with bamboos, and thatched with rice-straw. The front is an open veranda—the reception hall. Screened off from this is a quadrangle around which are the dwelling rooms. The front door-posts and pillars are often well carved. A deep stone-lined well is usually on the premises, or water is obtained from a hole sunk by the side of the rice-fields. Near the well is a hut for hot bathing. The low-caste servants have their huts at some distance away. The Coorg house is the domicile of all the male relatives, with their wives and children, belonging to one parental stock, and there may be 40, 60, or 80 and more inmates. The men plough the fields, transplant and reap the rice; the women carry manure, weed, fetch home and clean the paddy. The men do no menial work, which is left to the women and servants, while they enjoy a dignified repose, chewing betel and discussing affairs. Others, gun on shoulder, wander through the jungles in search of game. But the height of ambition with many is to figure as Government officials. Dwellings.

The religion of the Coorgs consists of ancestor and demon-worship; but domiciled Brāhmans have introduced Mahādeva and Subrahmanya under the name of Iggutappa, and have Brāhmanized the worship of the river Cauvery. The Nātas, or spots on which cobras have finished their course of terrestrial life, are the object of solemn ceremonies. Some of the *bānes* (parcels of grazing-ground or forest) have a presiding divinity to which an annual sacrifice of pork and cakes is offered. For Ayyappa-deva are set apart extensive forests called Devara-kāḍu, which are untrodden by human foot, and reserved for the abodes or hunting-grounds of defied ancestors. Religion.

A council of elders, called Takkas, are the moral censors and Customs.

regulators of social affairs. The institution is hereditary in certain families. The authority of the village Takkas extends over offences against social customs, attendance at and proper conduct during public feasts, drunkenness, and adultery. The offender has to appear before the council of the elders of the village, at the *ambala* (a place of assembly on the village green), where the case is examined into. The presiding Takka pronounces the sentence, which may amount to a fine of Rs. 10. Should the offender refuse to pay, he will be excommunicated, when he may appeal to the assembly of the Takkas of all the villages in the *nād*, and their decision is final. The contact of the Coorgs with Europeans, who chiefly settled in the country as coffee-planters, has not proved an unmitigated boon. With the influx of more money, intemperance, which was rigorously repressed in the times of the Rājās, got a fearful hold on the people, who, no longer satisfied with their own products, indulged in the strongest European liquors. A temperance movement started in 1883 by leading Coorgs and enforced by fines among themselves did not enjoy a long existence, but the pressure of hard times has tended to check indulgence in expensive liquors. Another institution of the Coorgs is the Aruva ('one who knows'). A particular friend of a neighbouring Coorg house becomes the Aruva of a family, and a member of this family is naturally the Aruva of the other. Aruvas act as representatives, counsellors, and guardians of families and individuals on the great occasions of life. All the preliminaries to a marriage are conducted through them. It is a sound rule that young people are not married under sixteen years of age. Negotiations for a marriage are conducted by the nearest relatives in the first instance; and when the assent of both the parties is obtained, the formal proposal is made by the parents, usually the mother of the young man to the mother of the intended bride. On the acceptance of the proposal, the nearest male relative accompanied by the Aruva proceeds to the bride's house, and fixes the marriage day in consultation with an astrologer. The Aruva and the other members of the bride's family will be present on the occasion, and the proposal is ratified in front of a lighted lamp in the hall. The ratification is evidenced by the bridegroom's party pledging an ornament with the bride's people. The peculiarity of a Coorg marriage consists in the fact that ceremonies are performed simultaneously in the respective houses of the bride and the bridegroom, unlike the marriages among other Hindus. On the eve of the marriage day the villagers are invited, and the necessary arrange-

ments for the next day's ceremonies are made. On the morning of the marriage day, at their respective houses, the bride and the bridegroom are bathed and dressed. They are then conducted to the hall, where they are seated on tripod stools with lighted lamps on either side, placed in plates containing rice. The assembled relatives and guests then give them presents. Before doing so they strew rice on their heads and give them a sip of milk from a spouted vessel placed on one of the plates. This over, the guests are fed sumptuously; and in the evening the bridegroom, accompanied by relatives and friends, starts for the bride's house, where they are received ceremoniously and fed. At the *muhurtam* hour, the bride and the bridegroom are seated side by side and presents are given again. The bridegroom gives his present last. The bride is then conducted to the kitchen. In the hall the Aruvas declare the marriage to be complete, and the bridegroom's Aruva delivers three pebbles to the bride to be tied to the hem of her garment in token of the permanency of the marriage contract. The bride is then led out by the bridegroom, and the party leaves the bride's house.

The Coorgs have been charged with polyandry; but if ever this was their custom, it is not so now. Polygamy is so far allowed that a second wife may be married if the first is not blessed with male issue. A young widow is sometimes taken to wife by another member of the same house, but this is a voluntary engagement on either part, and the woman loses all claim to her late husband's property. Divorce on account of unfaithfulness in the wife is a recognized institution, and is solemnly carried out by the Aruvas of the unhappy couple and by the Takkas of the village. The children remain in the father's house, the mother returns with all her belongings to the house of her parents. At child-birth, as soon as a Coorg boy is born, a little bow, made of a stick of the castor-oil plant, with an arrow, made of a leaf-stalk of the same plant, is put into his little hands, and a gun fired at the same time in the yard. He is thus introduced into the world as a future huntsman and warrior. At death, the bodies of young persons under sixteen and women are buried; those of others, especially old people, are burnt.

Festivals.

The festivals of the Coorgs are the Kāveri, the Huttari or harvest feast, the Bhagavati, and the Keilmuhurta or festival of arms. The Kāveri feast is at the time of the sun's entry into the sign of Libra, in October. It consists of a general pilgrimage to Tale-Kāveri, and bathing at a given signal in the tank

at the source of the Cauvery river. Those who
celebrate it in certain ways at home. The Hut
or so later, when the sun enters Scorpio. It
festival or feast of first-fruits. The name is sai
from the Malayālam *pudi-ari*, 'new rice.' Th
are taken up with feastings, pork and spirits bei
sumed, and with games and dances from sunse
o'clock every night on one of the *mandus*[1], wh
male population, except little boys and men of c
religiously to attend. The seventh is the great
tival. After various preparatory ceremonies, the
by the astrologer to cut the first sheaves goes at
fields in procession, with a lighted lamp in a dish
before him. He has a sickle in one hand, and a
of fresh milk in the other. In the appointed m
the sheaf, distributing stalks to those present, and
in the milk. The procession returns to the hous
of rice are bound to all the different parts. T
then kneads the Huttari dough out of various gr
of which every one eats a little. A supper fol
some of the new rice is used. Certain dances
for four days more. The Bhagavati feast is
two months before the monsoon. It consists in
image of the goddess in procession, holding Tant
levying contributions generally under dread of
with blindness or other infirmity. The K
a festival of arms held in August or Septem
labours connected with rice-planting are over
a break in the monsoon. The arms are all co
principal room and worshipped. Then follow
cises on the Uru-mandu or village green, wh
display their skill and dexterity with the vari
Next day takes place a general hunt in the
village, followed a day later by a great hunt
whole *nād* join.

Yeravas. Of tribes special to the country, the Yeravas
next to the Coorgs, the most numerous. T
characteristics have been described above. Th
entirely in the Kiggatnād and Yedenālknād *tā*
said to have come originally from the Wynaad.

[1] The *mandu* is an open public place or green. Village
three—the Panchāyati-mandu for business; the Devar
dances are performed in the name of the goddess Bhagava
mandu or village green, where the Huttari performances ta

a language of their own, a dialect of Malayālam. They are much sought after as labourers, and are slaves in all but the name. At their weddings and Pandalāta or demon feasts they chant their peculiar songs, and have dances in which their women take part. There are two sections—Panjiris and Paniyas. The former allow their fleecy hair to grow to dense masses which are never disturbed by a comb, but seldom have more than a few straggling hairs to represent a beard. Their appearance resembles that of the Australian aborigines. The Paniyas appear more civilized. Each section has a headman who seems also to act as its priest. The Paniya headman is called the Mūppa, and the Panjiri headman the Kanaladi. Their favourite deity is Karingāli, which means 'black Kali.' They eat pigs, rats, and vermin, but not beef.

Heggades.

The Heggades (1,503) are cultivators from Malabar. They conform to Coorg customs and speak the Coorg language, but are not admitted to community with the Coorgs, in whose presence they are allowed to sit only on the floor, while the former occupy chairs or higher seats.

Ayiri.

The Ayiri (898) are the artisan caste. They are said to have come from Malabar in the seventeenth century, but now speak the Coorg language and follow many of the Coorg customs. According to occupation there are Tattās (goldsmiths), Kollas (blacksmiths), and Tacchāyiris (carpenters), all of whom intermarry. But none will intermarry with a section called Kambala Ayiris, who are regarded as outcastes. The Ayiris do not employ Brāhmans but perform their own ceremonies, and do not wear the sacred thread. They eat mutton, game, and pork, but not beef, and drink spirits.

Medas.

The Medas (584) are basket and matmakers, and act as drummers at the feasts. They dress like Coorgs though in poorer style, but are of Mysore origin, and speak the Coorg language and a little Kanarese.

Maleya.

The Maleya (129) are gipsies from Malabar, who profess to cure diseases.

Binepatta.

The Binepatta (98) were originally musical mendicants from Malabar, but have taken to agriculture and speak the Coorg language.

Kavadi.

The Kavadi (49) are cultivators in Yedenālknād, who have adopted the Coorg language and dress. They are said to have come originally from Malabar.

Holeyas.

Of tribes not special to Coorg the most numerous are the Holeyas (27,000), who do all the menial work for the Coorgs, and were formerly their slaves. There are four sections—Badagas from Mysore, Kembattis and Māringis from Malabar, and Kukkas from Tuluva.

Lingāyats.

Next to them in number are the Lingāyats (8,700). This is properly a religious sect, and is

Tulu Gaudas.

described, as well as the Holeyas, in the artic The most important Tulu class are the Ga They are found principally along the western bo speak Tulu and the men wear the Coorg dress. indicates, they are farmers. The Tīyas (1,50 (1,400) are Malayālam immigrants, and have har with them. The chief Tamil class is the Vellā Marāthās there are 2,400, and of Brāhmans on most numerous Musalmāns are Māppillas or M and next to them Shaikhs (4,400). Both are

Musalmāns.

Christians.

There are 3,160 native Christians, 295 Euras Europeans. The Christians have increased by The following are the principal den since 1891.

	Europeans.	Eurasians.	N.
Roman Catholic . . .	13	175	2
Anglican . . .	163	90	
Lutheran . . .	17	18	

As the figures stand, the Roman Catholics 14 per cent. since 1891. The Anglicans show a 458 to 259, and the Lutherans an increase fro But 152 who returned themselves merely as 1891 may have been Lutherans, and there were that year than in 1901 who did not return their these figures afford no basis for useful comp Church of England is under the Bishop of Ma churches at Mercāra and Pollibetta. There is chaplain, but they are visited periodically by th Mysore.

Christian missions.

The first Christian settlement was the Roma 1792, which arose out of the persecutions of Tipū his capture of Bednūr and siege of Mangalore deported to Seringapatam large numbers of Konk from the west coast for having given assistance t In 1792, during the siege of Seringapatam by Lor they made their escape, and were eagerly welcom Vīra Rājendra, the Coorg Rājā, into his depopul He gave them land at Vīrarājendrapet, obtained them from Goa, and assisted them in building a he endowed with an allowance of rice, oil, and ca was commuted by the British Government in monthly grant of Rs. 20. The community is unde Catholic Bishop of Mysore at Bangalore, the

Archbishop of Goa to control them having been rejected in 1846, and the see of Mangalore having declined to send priests. The church was rebuilt with Government aid in 1835, and on a larger scale in 1866, with a priest's house, and schools for boys and girls. The Christian quarter of the town has a clean and tidy appearance. But no Coorg and hardly any other high-caste people of Coorg have ever joined it. There are also Roman Catholic churches at Mercāra, Vīrarājendrapet, Ammatti, Siddapur, Fraserpet, and Suntikoppa, with special schools at Vīrarājendrapet and Kedamullur.

The only Protestant mission to the Coorgs is the Basel Lutheran Evangelical. On the annexation of the country by the British in 1834, Colonel Fraser considered it a specially favourable field for a mission, owing to the absence of caste among the people, and offered his share of prize-money for the purpose of founding one. But neither the Wesleyan nor the London Missionary Society could spare men for a new place so far from their existing stations. The Colonel, however, established a school at Fraserpet and endowed it. The Basel Mission had in this year commenced work on the west coast, and occasional visits were paid to Mercāra and Vīrarājendrapet. But it was not till 1852 that mission work was permanently entered on in Coorg, under somewhat romantic circumstances. Dr. Moegling of the Basel Mission at Mangalore was about to return to Germany for his health when he was visited by a Coorg man, disguised as a *sannyāsi*, who applied for Christian instruction. He was baptized in 1853, and returned to his house in Coorg, accompanied by Dr. Moegling, being gladly received by his wife, who declared her intention never to leave him. But his neighbours and relatives drove him from his house, and he was beset by creditors. He took refuge with the missionary at Vīrarājendrapet, and on the case being referred to head-quarters, Sir Mark Cubbon, the Chief Commissioner, directed that his house should be restored to him. A church was now built on ground given by the convert, and preaching at the various market-places was commenced. Dr. Moegling, having started the mission on his own responsibility, had to find support for it, which he did for six years, compiling for this purpose his *Coorg Memoirs*, an interesting account of the country and its people. Two more Coorg families had meanwhile joined him, and 130 Holeyas, for whom a settlement named Anandapur was formed on a waste farm taken from Government at Ammatti-nād, presided over by the Rev. Mr. Kaundinya, a Brāhman convert made by Dr. Moegling at

Mangalore. The Doctor went to England in 1858 to seek union with the Church Missionary Society, but they could only give him a grant (of £500), and advised him to continue with the Basel Mission. Encouraged by this help he returned to Coorg, but had to leave India for good in 1860. The colony has since been maintained by the Basel Mission, but its situation in the Bamboo district has proved very unhealthy. The original convert seceded and disappeared, and little further progress seems to have been made in connexion with the Coorgs. Chapels and schools exist at Mercāra and Ammatti.

Occupations. No less than 82 per cent. of the inhabitants subsist by agriculture in some form or other. As many as 46 per cent. are landholders and tenants, 19 per cent. are agricultural labourers, and 16·5 per cent. are engaged in the cultivation of coffee, as owners or managers of estates, or labourers employed on them. Of the Coorgs themselves, 98 per cent. are engaged in agriculture, and 1 per cent. in the administration.

Agriculture. Soils. The weathering of the metamorphic rocks which compose the mountains of Coorg, chiefly granite, syenite, and mica schist, has produced a deep surface soil of great fertility, which is annually renewed by the decomposition of the virgin forest. The soil in the north-east resembles that of the neighbouring parts of Mysore.

Principal crops. Rice. Rice is the staple product of Coorg, and the yield from ancient times has furnished an unfailing supply for home consumption and for export to the Malabar coast. Wherever practicable the valleys have been formed into flats and terraces for rice cultivation, the finest stretches of which are to be found at Kadanur and Bittangala near Vīrarājendrapet, and in the Lakshmantīrtha valley near Hudikeri and Devanūr. The copious rainfall and the multitude of small rivulets rising in the wooded ravines render the cultivation in great measure independent of artificial irrigation. Rice is practically the only cereal crop in Coorg proper. The species most commonly cultivated and in general use is the large-grained *dodda batta*, which is also exported. A finer and more palatable variety is the small-grained *sanna batta*, and yet another species is the red grain known as *kesari batta*. For parched rice *kalave* is the kind used. The system of cultivation is that of transplantation. Small heaps of cattle manure and dry leaves having been burnt on the spot and their ashes scattered over the ground, ploughing begins with the first showers in April and May, being solemnly entered on with appropriate ceremonies. The ground having been ploughed over several times and

levelled, 'till the soil is soft as treacle, and the foaming surface white as milk,' the transplanting takes place during July and August. This is done only by the men; and on its completion they have races through the heavy slush, a space about 10 feet wide having been left in the whole length of the fields for the purpose, and prizes are awarded to the first four or five. The rice harvest is gathered in November and December, being celebrated with the Huttari festival already described.

To a considerable number of Coorgs the cultivation of cardamoms was formerly second in importance only to that of rice, and the possession of a fine cardamom jungle was regarded as a mine of wealth. In the time of the Coorg Rājās, and for some time after, cardamoms were a State monopoly and were purchased at a fixed rate from the cultivators. The jungles are now leased by the Government. But during the last twenty years the price of this product has fallen to such an extent that it now scarcely pays to collect the berries, and many well-to-do families who depended chiefly upon their cardamom *males* for the purchase of articles required to supplement the produce of their rice-fields have been greatly impoverished. The cardamom plant grows spontaneously in the evergreen forests or *males* along the Ghāt line and its spurs, at an elevation of from 3,000 to 5,000 feet. Still, nature requires a certain stimulus to produce the plant in greater abundance, which is effected by felling a big tree on a cleared space in the forest. February or March is the season for this, and the shaking of the ground causes the young plants to shoot up within three months. The capsules appear in the third year, and ripen in September or October, when the crop is gathered. But it is not till the fourth year that a full harvest is obtained; and the plants may yield a good crop for seven years, when the felling of another big tree on the top of them is needed to reinvigorate them. In order to protect the forests, the areas to be cleared for cardamoms are strictly limited to plots of not more than one-sixth of an acre. Cardamoms.

A brief account has been already given of the introduction of coffee cultivation, which during the past forty years has held such a prominent place in Coorg, and effected such great changes in the country. But the deep depression which has in the past decade overtaken this once flourishing industry has led to the abandonment of many estates, and renewed interest in their old rice cultivation is reviving among the Coorgs. Other products which have been tried by Europeans are cinchona and tea, but in neither case has there been any decided Coffee.

success. A syndicate in London which took up an area of 2,000 acres for the latter has relinquished it.

The coffee estates may be classified into three groups: those of the Mercāra plateau, those of the Ghāt ranges, and those of the Bamboo district. The Mercāra plateau, with an elevation of 3,500 to 4,000 feet, enjoys a bracing climate, being equally exposed to the sweeping monsoon rains and to the drying east winds. An average rainfall of 123 inches, distributed over almost the whole year, provides ample moisture. The granitic soil consists generally of a red felspathic clay, more or less mixed with gritty ferruginous stones, and covered with a layer of humus. The land being steep, provision must be made, by terracing, draining, and a judicious system of weeding, against the wash of the surface soil. Artificial shade is not required, for the sheltered hill-sides and gently sloping valleys are here covered with the most luxuriant and productive trees. The Ghāt estates extend along both sides of the Sampaji valley, along the Periambadi *ghāt*, and over the eastern and western declivities of the Western Ghāts. Originally covered with primaeval evergreen forest, these tracts possessed a splendid soil, whose fertility was heightened by a heavier fall of rain than on the Mercāra plateau, and also by a variable condition of atmospheric humidity. But the extensive felling of forest, followed by burning, which destroyed a great deal of the valuable surface soil, converting the humus into ashes which were blown or washed away, and a faulty system of weeding in order to show a clean surface, all added to the impoverishment of the soil. The exposed trees, thus left without nourishment during successive seasons of drought, fell an easy prey to the borer, and also suffered severely from bug, leaf rot, and leaf disease. The abandoned estates have been overrun by the *Lantana*, a shrub introduced in 1863, which has covered the hill-sides with an almost impenetrable bush. The Bamboo district lies in the zone of deciduous forest extending all along the eastern ranges. The elevation is from 3,000 to 3,500 feet, and the annual rainfall between 45 and 75 inches, steadily decreasing to the eastward. The land generally presents undulating slopes and but few steep hills. The soil is of the richest kind, as the humus from an exuberant vegetation, which annually decays or is consumed by jungle fires, has accumulated for ages without being disturbed by heavy floods. The rainfall is gentle and seasonable, and the growth of coffee most luxuriant and productive. If anywhere in Coorg, this is the typical habitat of the coffee-tree; but it was here that the borer committed its

most destructive ravages, the means of counteracting which are now happily better known. On these estates artificial shade is deemed necessary.

'Dry' crops, of which *rāgi* is the chief, are cultivated only in the Nanjarājpatna *tāluk*, along the west bank of the Cauvery, and are similar to those of the adjacent parts of Mysore. 'Dry' crops.

Of fruit trees the plantain is common all over Coorg, and its stems are in requisition for some of the national sports and festivals. But the Coorg oranges are famous, and as common as the plantain. The best variety is the sweet and luscious 'loose jacket,' so called because the rind of the ripe fruit is almost detached from the pulp. Fruit trees.

Up to 1904 there had been advanced for agricultural loans a sum of Rs. 49,000, and for land improvement Rs. 40,000. Agricultural loans.

As regards the indebtedness of the Coorgs, the Chief Commissioner, writing in 1899, said:—

> 'Their country has been pauperized by the introduction of such a ready means of becoming rich as presented itself some years ago in the cultivation of coffee, with the higher style of living which unfortunately resulted, and especially the facility for extensive borrowing which it afforded. It is now extremely difficult to obtain advances on coffee estates, and the Coorgs have nothing else to offer as security; if they mortgage their *sāgu* rice lands (*jama* lands being inalienable) they cannot live. . . . The matter seems to be as yet hardly ripe for Government intervention, nor is the situation so desperate as to call for extraordinary measures. There are, I believe, some signs that the Coorg character is slowly undergoing change, in recognition of the necessity for thrifty living and the abandonment of the foolish pride which has operated to prevent the people taking service, while it tolerated dissipation and laziness.'

The climate is unfavourable to most domestic cattle. The only animals that thrive well are the buffalo and the pig, the latter the favourite animal for food, especially at festivals. Donkeys and goats also do well, but not sheep, except in the east. The Coorgs procure their cattle partly from Mysore, partly from the annual fair at Subrahmanya in South Kanara; and a strong breed is needed for ploughing the heavy rice-fields. Cattle, &c.

The only canal irrigation project in Coorg is in connexion with the Chikkahole river, from which a channel has been taken off on the right bank. But, owing partly to the porous nature of the soil through which it is cut, and partly to the damage done by wild elephants, it has been found impossible hitherto to ensure a regular supply of water sufficient to irrigate the fields under it. A dam is under construction at Devanūr, and a Irrigation.

project at Segai Hosūr is being considered. The Niluvāgal and Dodda-Kanagalu tanks in the Nanjarājpatna *tāluk* have been successfully restored.

STATISTICS OF AGRICULTURE (FOR THE YEAR ENDING JUNE 30)

	Average, 1881-90 *.	Average, 1891-1900.	1900-1.	1903-4.
	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.
Total area	1,582	1,582	1,582	1,582
Total uncultivated area	1,289	1,321	1,279	1,355
Cultivable, but not cultivated	111	122	145	242
Uncultivable	1,006	1,199	1,134	1,113
Total cultivated area	211	261	303	227
Irrigated area (from canals)	0.81	1.3	2.1	2.1
Total cropped area.				
Rice	115	130	147	126
Rāgi	...	13	28	9
Other food-grains and pulses	2.4	0.4	0.4	5.6
Oilseeds	...	0.07	0.07	0.2
Condiments and spices	0.5 †	1.6	1.5	1.9
Coffee	92	112	107	82
Tobacco	...	0.02	0.03	0.1
Cinchona	2.4 ‡	0.08	0.01	0.3
Miscellaneous	0.12	5.4	20	4.7
Total area cropped	212	262	304	229
Area double cropped	0.8 ‡	1	1.1	1.7

* Nine years. † Four years. ‡ Seven years.

Rents, wages, and prices.

The average rates of rent per acre for land suited for rice are maximum Rs. 4-8-0, minimum Rs. 1-8-0; for land suited for inferior grains, maximum Rs. 1-12-0, minimum R. 0-3-0; for land suited for coffee, maximum Rs. 2-4-0, minimum R. 0-8-0. The rate of wages in 1901 was R. 1 a day for skilled and 6 annas for unskilled labour. In 1881 the respective rates were R. 1 and 4 annas; and in 1891 they were 12 annas and 5 annas.

PRICES OF STAPLE FOOD-GRAINS, ETC. (in Seers per Rupee)

	1880.	Average for ten years ending	
		1890.	1900.
Rāgi	30.13	30.5	22.7
Rice	16.10	15.4	11
Gram	25.11	23.1	15.5
Salt	8.5	10.1	9.6

Forests.

The Forest department is in charge of a Deputy-Conservator. The 'reserved' forests in 1904-5 covered an area of 409 square miles. The other 'protected' tracts are: Ghāt forests, 293

square miles; Devara-kādu or sacred groves, 24 square miles; Ur-udve or village forests, 14 square miles; and Paisāri or Government waste, 269 square miles. The last have now been placed under the Revenue department. The Ghāt forests in the west are known as Male-kādu, and lie in the evergreen belt. One of the finest trees here is the poon-spar (*Calophyllum tomentosum*). *Vateria indica*, *Calophyllum elatum*, *Michelia Champaca*, *Garcinia Morella*, *Cinnamomum iners*, *Diospyros Ebenum*, *Artocarpus hirsuta*, *Cedrela Toona*, *Acrocarpus fraxinifolius*, and *Mesua ferrea* are some of the most conspicuous and useful trees in this belt. The dense undergrowth in these forests is so thorny and tangled that they can be penetrated only by beaten paths under the direction of an experienced guide. Owing to their inaccessibility these forests are but little worked. The forests to the east are termed Kanave-kādu, and are composed mainly of deciduous trees and immense clumps of bamboo. *Dalbergia latifolia*, *Terminalia tomentosa*, *Pterocarpus Marsupium*, *Tectona grandis*, *Santalum album*, and other trees are found here. *Mangifera indica*, *Artocarpus hirsuta*, *Lagerstroemia lanceolata*, and *Bombax malabaricum* tower above the others. The tamarind (*Tamarindus indica*) is found only in a few places along the Cauvery between Fraserpet and Somvārpet. The 'reserved' forests in this belt are being systematically worked, the timber finding a ready sale in Mysore. The four large Ghāt blocks have been settled, and rules framed for protecting the forest glades called *mandus* and *ambalas*, which are Coorg places of assembly. Grazing has been restricted to six months in the year on prescribed areas at reduced fees, but free grazing is permitted to those who had a customary right to it. Free grants of forest produce are made to deserving ryots.

Besides what is realized from minor produce, the revenue from cardamoms is credited to forests. The Kurumbas receive rewards for weeding and raising teak plants on spaces that have been used for *kumri* cultivation. The following table shows the forest revenue and expenditure:— Forest revenue.

	Average for ten years ending		1900-1.	1903-4.
	1890.	1900.		
	Rs.	Rs.	Rs.	Rs.
Revenue . .	1,07,194	1,50,262	1,39,567	2,24,053
Expenditure .	69,810	79,806	70,906	92,191
Surplus . .	37,384	70,456	68,661	1,31,862

Mines and minerals.

There are no mines in Coorg, and the only minerals produced are granite for road-metal and building, laterite for the same purposes, and clay for bricks and tiles. The estimated quantity of these extracted in 1901 was 9,805 tons of granite, 287 tons of laterite, and 940 tons of clay.

Some prospecting for gold took place when the Wynaad mines were being explored, but on the failure of these the matter was dropped. In 1898 mica was discovered in the pegmatites in the south. Sheets 30 inches across were obtained, but the commercial value has not been such as to induce much effort in regard to it. Graphite occurs in small quantities. The fee for a licence to prospect for minerals is Rs. 5.

Arts and manufactures.

There are no manufactures in the larger sense of the term. The Coorg knives, some of which are highly finished and handsomely ornamented, are the only articles made in the country worthy of notice. The girdle-scarfs with ornamental borders worn by the Coorgs are made at Sirangala on the north-east frontier. Coarse cotton cloths are woven in north Coorg, with a finer kind at Sanivārsante.

Factory industries.

The only factory employing a number of hands is the distillery near Fraserpet, the output of which has been greatly diminished since the depression in coffee. Tile and pottery works were opened in Mercāra in 1882 and carried on till 1898.

Commerce and trade.

Somvārpet and Kodlipet are places of some trade. The largest weekly markets are held at Gonikoppal, Ammatti, and Siddapur, in south Coorg; and at Suntikoppa and Sanivārsante, in north Coorg.

Imports and exports.

The chief imports are *rāgi*, gram, rice, pulses, live-stock, sugar, salt, oils, and piece-goods. The principal exports are coffee, cardamoms, rice, oranges, timber, sandal-wood, and hides.

The table on the next page shows statistics of the value of imports and exports, in thousands of rupees.

Means of communication.

There are no railways; but a line from Mysore to Tellicherry on the west coast has been surveyed, which would pass across Coorg from north of Fraserpet in the east to south of the Periambadi *ghāt* in the west. From Periāpatam in Mysore trunk-roads run west through Fraserpet and Mercāra by the Sampaji *ghāt* to Mangalore on the coast, and through Siddapur and Vīrarājendrapet by the Periambadi *ghāt* to Tellicherry, with a branch from Siddapur to Mercāra. There is also a road from Hunsur in Mysore through Titimati to the Periambadi *ghāt*. A main road runs longitudinally through Coorg from

Imports and Exports

	1890-1.	1900-1.	1903-4.
Imports.			
Agricultural implements	20	5	10
Animals, living	1,11	1,05	1,25
Apparel, haberdashery, and millinery	3	10	12
Arms and ammunition	4	2	8
Books, prints, maps and charts	4	2	2
Building and engineering material	20	4	10
Candles	2	1	2
Coir, manufactured	4	2	3
Cotton	1	1	2
,, manufactured piece-goods	1,00	80	1,25
Drugs and medicines	19	16	19
Earthenware	1	1	38
Flax manufactures and ropes	4	1	2
Fruits and vegetables	53	25	25
Glass and glassware	4	4	7
Grain	2,00	4,00	3,50
Gums and resins	1	1	2
Hardware and cutlery	3	12	18
Leather manufactures	3	3	4
Liquors	79	35	46
Machines, &c.	2	1	3
Metals	15	7	10
Oils	91	1,40	2,60
Paper and pasteboard	6	4	4
Provisions	2,17	1,00	1,25
Salt	2,00	1,25	1,40
Spices	58	35	60
Sugar, &c.	86	1,35	1,10
Silk	6	1	3
Tobacco	20	16	35
Umbrellas	9	9	12
Wood and timber manufactures	11	3	25
Wool and woollen manufactures	40	15	28
Sundries	67	85	1,15
Treasure	2,47	14,10	5,00
Government stores	7	14	25
Total	17,18	28,10	22,65
Exports.			
Coffee	25,55	20,00	25,90
Drugs	1	½	½
Fruits	7	9	12
Grain and pulse	25	1,25	2,70
Hides and horns	30	24	24
Cardamoms and spices	54	38	48
Wax	1	1	2
Wood (including sandal-wood)	1,04	1,19	1,99
Total	27,77	23,16½	31,45½

Mercāra north through Somvārpet to Kodlipet, and south through Vīrarājendrapet, Gonikoppal, and Hudikeri to the Wynaad frontier. Local tracks or footpaths cross the country in all directions. The length of Imperial roads in 1904 was 215 miles, of which 143 were metalled. The length of Local fund roads, unmetalled, was 130 miles.

Post office and telegraphs.

The Postal department is under the control of the Postmaster-General of Madras. Since 1894 the foreign and outside mails have been carried by *tonga dāk* from the railway at Mysore to Mercāra. In 1901 the District post was transferred to the control of the newly formed District board, and in 1906 re-transferred to the control of Government. The number of post offices in 1904–5 was 27. The mails were carried over 262 miles. The number of letters delivered was 420,000, of postcards 168,000, and of newspapers 68,000. Money orders were issued to the value of 3½ lakhs. Savings banks deposits amounted to Rs. 56,000 and withdrawals to Rs. 55,000. There are seven telegraph offices, which are combined with the larger post offices.

Administration.

The Province is directly under the Government of India, and controlled by the Chief Commissioner of Coorg, who is the Resident in Mysore, with head-quarters at Bangalore. In him are combined all the functions of a Local Government and High Court. The Secretariat is at Bangalore, where the First Assistant Resident is styled the Secretary to the Chief Commissioner of Coorg.

In Coorg itself the chief authority is the Commissioner, whose head-quarters are at Mercāra, and whose duties practically extend to every branch of the administration. In the Revenue department he has the help of two Assistant Commissioners and an Assistant Superintendent of Land Records. Of the two Assistant Commissioners, one is a European with head-quarters at Mercāra, invested with specified revenue powers in certain *tāluks* (Yedenālknād and Kiggatnād), and the other is a Coorg, who is a Personal Assistant to the Commissioner in dealing with vernacular correspondence and for such special duties as may be assigned to him. The Assistant Superintendent of Land Records, besides maintaining those, attends to Survey and Revenue Settlement matters. He is also Assistant Director of Agriculture.

Administrative divisions.

For administration the country is divided into five *tāluks*, each under the control of a *sūbedār*. These are Nanjarājpatna (which since 1894 has included the old Yelusāvirashīme *tāluk*), Mercāra, Pādinālknād, Yedenālknād, and Kiggatnād. Each

tāluk is subdivided into *nāds*[1] (of which there are nineteen, averaging 83 square miles in extent), each *nād* into circles (*māgani*), and each circle into villages (*grāma*). The official in charge of a *nād* is called the *parpattigar*, whose chief duty is the collection of the revenue, in which he is assisted by accountants called *shānbhogs*. The principal village official is the headman or *pātel*.

In his civil capacity the Commissioner exercises the original and appellate powers of a District court. By the Coorg Courts Regulation which came into force in 1901 a Subordinate Judge was appointed, on whom falls the greater part of the work which used to come before the District court. The five *sūbedārs* were at the same time relieved of civil powers, while the jurisdiction of the two Munsifs was extended by the addition of Small Cause powers. The Subordinate Judge thus tries original suits, and hears appeals transferred to him by the Commissioner. The only other Civil Courts are those of the Assistant Commissioner and the Munsifs of Mercāra and Vīrarājendrapet, whose powers extend to original suits limited respectively to Rs. 3,000 and Rs. 1,000. The Small Cause powers of the Munsifs are limited to Rs. 50. Civil justice.

JUDICIAL STATISTICS

	Average for ten years ending			
	1890.	1900.	1901.	1904.
Civil.				
Suits for money and movable property	2,985	3,107	1,750	1,349
Title and other suits	128	162	153	135
Total	3,113	3,269	1,903	1,484
Criminal.				
Number of persons tried:—				
(*a*) For offences against person and property	1,825	1,653	979	622
(*b*) For other offences against the Indian Penal Code	618	1,022	553	1,406
(*c*) For offences against Special and Local laws	866	1,207	937	515
Total	3,309	3,882	2,469	2,543

[1] In the north of Coorg the *nād* is termed a *hobli*, as in Mysore.

Criminal justice.

The Commissioner is the District and Sessions Judge. Appeals lie from him to the Chief Commissioner in his capacity of Judicial Commissioner, while he is himself the court of appeal from the European Assistant Commissioner and the Subordinate Judge. The former is the District Magistrate, and exercises general supervision over the Subordinate Judge, who is a first-class magistrate, and over the seven second-class magistrates, namely, the Munsifs of Mercāra and Vīrarājendrapet and the five *tāluk sūbedārs*.

Registration.

The registration offices, of which there are nine, are each under a sub-registrar, and are supervised by the Subordinate Judge in his capacity as Registrar of Coorg, subject to the orders of the Commissioner, who is the Inspector-General of Registration. The average number of documents registered from 1881 to 1890 was 786, and from 1891 to 1900 1,954; in 1901 the number was 1,491, and in 1904 1,489.

Finance.

The treasury administration is in charge of the Subordinate Judge in his capacity as Treasury officer at head-quarters, under the general control of the Commissioner, and in direct subordination to the Comptroller, India Treasuries. The financial transactions all come under the head Imperial, with the exception of those relating to municipal, village service, or Local fund matters.

PRINCIPAL SOURCES OF ORDINARY REVENUE

(In thousands of rupees)

	Average for ten years ending		1900-1.	1903-4.
	1890 *.	1900.		
Land revenue	3,27	3,77	3,58	3,75
Stamps	82	91	54	43
Excise	1,55	2,45	1,90	1,83
Provincial rates	...	36 ‡	7	7
Assessed taxes	10 †	12	10	8
Forests	1,08	96	80	91
Registration	4	7	4	4
Other sources	54	72	48	40
Total	7,40	9,36	7,51	7,51

* Nine years. † Four years. ‡ Five years.

EXPENDITURE UNDER PRINCIPAL HEADS

(In thousands of rupees)

	Average for ten years ending		1900-1.	1903-4.
	1890*.	1900.		
Opening balance	3,90	3,87	2,54	5,95
Charges in respect of collection (principally land revenue and forests)	1,90	2,22	1,59	1,71
Salaries and expenses of civil departments:—				
(a) General administration	36	37	57	49
(b) Law and justice	48	51	51	54
(c) Police	21	29	35	43
(d) Education	32	35	38	21
(e) Medical	8	21	15	...
(f) Other heads	18	11	4	1,77
Pensions and miscellaneous civil charges	8 †	9	8	10
Famine relief	...	...	...	...
Irrigation	...	8 ‡	...	...
Public works	1,41	1,80	3,24 §	3,40
Other charges and adjustments	42	21	15	4
Total expenditure	5,44	6,24	7,06	8,69
Closing balance	3,54	3,73	1,81	2,25

* Nine years. † Seven years. ‡ Only 1896-7.
§ Of this, 117 was for special work in Bangalore.

The chief land tenures are the *jama* and the *sāgu*. The former is confined to a privileged class called *jama* ryots, who are either Coorgs, Gaudas, Moplahs, or occasionally Brāhmans. It is described as a proprietary tenure, distinguished by paying only half the ordinary assessment, or Rs. 5 per 100 *bhattis*. A *bhatti* of land is an area capable of producing a *bhatti* of paddy, which is thus strictly a measure of volume, but 100 are roughly held to be equivalent to 3 acres, though the area really varies with the quality of the soil. *Jama* land is held on condition of rendering service to the state if required, which now consists principally of escorting treasure, or assisting the revenue officers when on tour. Such land cannot be sold, mortgaged, or alienated in any way without the sanction of Government. For every *jama* farm a *sanad* is granted, for which a succession fee called *nazar kānikē*, of Rs. 10 per 100 *bhattis*, is paid in three yearly instalments. On taking possession a fee of R. 1, called *ghatti jama*, is paid, and with the delivery of the *sanad* the Commissioner gives to the grantee a handful of the soil. Land revenue. Land tenures.

Similarly, if the holder wishes to resign his *jama*, he lays down a handful of the soil and returns the *sanad*. *Jama* land cannot be sublet without the permission of Government, and cannot be held by a woman unless she provides an efficient substitute from among the male members of the family in case of service being required. The ordinary tenure is the *sāgu*, which is *ryotwāri* with no condition of service. The assessment payable is Rs. 10 per 100 *bhattis*.

A rice holding under either tenure is called a *varg*, and the holder a *vargdār*[1]. Each rice *varg* in Coorg proper had generally a *bāne* attached, which was forest land held free of assessment, for grazing, leaf-manure, firewood, and timber required for the use of the *varg*. While the rice-fields were carefully measured, the *bānes* were not measured nor were their boundaries fixed. When coffee was introduced, these became suddenly of great value, sometimes more valuable than the rice lands to which they were attached. The boundaries not being defined, the people encroached on large tracts belonging to Government, and alienated land wholesale to planters, or felled the timber and opened out plantations themselves, entirely destroying their usefulness as *bāne* for the *varg*. To check this the ryots were allowed to cultivate coffee in their *bānes* up to an area of 10 acres free of assessment, but beyond that the *bānes* are assessed at Rs. 2 an acre if the forest has been felled and coffee cultivated thereon.

There are also some lands held as *jāgīr* or rent-free, and others as *umbli*, or at reduced rates from R. 1 to Rs. 3 per 100 *bhattis*. The latter are in recognition of services rendered in the time of the Rājās by the original grantee, or in north Coorg as part remuneration of the *pātels* for public service. Some religious establishments and a few village headmen hold lands on *jodi* or favourable tenure, paying half the ordinary rate.

Waste land taken up for coffee cultivation is free of assessment for four years; from the fifth to the twelfth year inclusive it is charged R. 1 an acre, and after that Rs. 2. Waste land other than 'reserved' forest or tracts set apart for communal purposes is ordinarily sold by public auction under the Waste Land Rules. But if required for rice cultivation, it is given to the applicant considered to have the best claim, subject only to payment of the value of the timber growing on it; the revenue is also remitted or reduced for a term of years, with reference to the period for which the land has previously been out of cultivation.

1 These terms generally appear as *warg* and *wargdār* in official reports.

Kumri cultivation, which consists in felling the forest, raising a few crops on the rich virgin soil, and moving on to a fresh patch of forest after two or three years, was for some time strictly prohibited. But it is now allowed to a small extent in Sampaji-Tavunād in the Padinālknād *tāluk* in favour of certain wild tribes accustomed to this method of cultivation. Ten acres a year is the limit beyond which no ryot can resort to this system, and Rs. 2 an acre is levied on the land cleared for the purpose.

Clearings in the evergreen forest on and below the Ghāts for the growth of cardamoms are restricted to one-sixth of an acre. Cardamom *males*, as these hills are called, are taken on lease for periods varying from three to twenty-one years; but owing to the fall in the price of this product the industry has decayed, and heavy remissions of revenue have been necessary.

Land assessment.

In 1806 Dodda Vīra Rājā made a settlement of the old Yelusāvirashīme *tāluk* and of a part of the Nanjarājpatna *tāluk*. But in 1812 Linga Rājā had a careful register prepared of all the revenue assessed lands in Coorg. Rice land only was assessed, and the Government share was fixed at one-tenth of the produce. Details are given in the accounts of every *varg* or holding, and the position of the attached *bāne*, *barike* (swampy ground for grazing), and *hittalmane-dala* (building site); but for these adjuncts no measurements or boundaries are supplied, which gave rise to endless disputes.

The settlement on the basis of the recent survey was begun in 1894, but proceeded very slowly, owing to the high standard of work adopted under some misapprehension of the wishes of the Government of India. An interim summary procedure was therefore ordered towards the close of 1895, and new rates were levied from 1896, to remain in force for ten years to 1906. Unassessed areas discovered by the survey were thus brought under settlement, and the existing rates on ordinary 'wet' and 'dry' cultivation were raised all round by one anna in the rupee. An increase of Rs. 60,000, or nearly 20 per cent., resulted in the land revenue, more than three-fourths representing assessment at the old rates on unauthorized encroachments, many of which had been cultivated surreptitiously for years. Of the rest, Rs. 11,900 was the increase due to the enhanced rate of one anna in the rupee. The principal object in imposing this was to assert the right of the state to raise the assessment on *jama* lands, in respect of which the holders had advanced a claim of permanent settlement, disallowed by the Government of India. The average rates on fully assessed

'wet' and 'dry' lands are respectively Rs. 3-0-2 and R. 0-9-10 per acre, which compare favourably with those in force in the adjacent parts of Mysore and Madras.

The summary settlement gave rise to considerable discontent at the time, owing to the season when it was introduced being unfavourable, in addition to which coffee was declining and the money market was tight. But this feeling was chiefly confined to the holders of *jama* land, who objected to what they contended was an alteration in their permanent settlement. As a measure of relief, two antiquated taxes called *dhūli* and *mohatarfa* were abolished; and since 1898 all appearance of combined agitation has disappeared, from which it may be assumed that the settlement involved no real burden on the cultivator.

In 1881-2 the total revenue was 7·12 lakhs, of which the land revenue yielded 3·46 lakhs. In 1900-1 the total revenue was 7·51 lakhs and the land revenue 3·58 lakhs. In 1903-4 they were 7·51 and 3·75 lakhs respectively.

Miscellaneous revenue. Excise.

The Excise revenue is chiefly derived from arrack and toddy, under the heads licence fees, still-head duty, and rent of toddy-trees. Other items are opium and *gānja*. As an effect of the continued agricultural depression, there is an increasing tendency to the consumption of toddy as being cheaper than arrack. The only distillery is at Madapatna near Fraserpet. The rate of duty is Rs. 4-1-1 per gallon, and the quantity issued in 1904-5 was 36,797 gallons, at 20° under proof, equivalent to 29,273 gallons at London proof. The number of wholesale licences granted was 3 for sale of European liquors and 4 for arrack. The number of retail shops was 6 for sale of European imported liquors (which includes the 3 wholesale shops), 45 for arrack, and 292 for toddy. A systematic reduction has been made in the number of arrack and toddy shops, with reference to local requirements. The amount of opium issued was 32 seers 52 tolas, at Rs. 57-8-0 per Madras seer, the average retail price being Rs. 60 per seer. The wholesale supply of *gānja* is arranged for departmentally, as owing to the heavy duty payable on the drug no contractor is forthcoming. About 816 seers were issued to 5 licensed vendors, at an enhanced price of Rs. 5 per seer. The net excise revenue during the decade 1881-90 averaged 1·52 lakhs, and during the decade 1890-1900, 2·39 lakhs; in 1900-1 the amount was 1·84 lakhs, and in 1904-5 1·73 lakhs. The terms of a new contract and the abolition of *ābkāri* cess account in great part for the decrease.

The net revenue from stamps was: judicial Rs. 57,000, non-judicial Rs. 22,000 in 1881–90 (average); Rs. 65,000 and Rs. 24,000 in 1890–1900 (average); Rs. 40,000 and Rs. 12,000 in 1900–1. In 1903–4 the figures were Rs. 32,000 and Rs. 12,000. The decline is due to the decrease of trade and the fall in the value of landed property owing to the depression in coffee-planting, the chief industry of the Province. Stamps.

The net revenue from income tax for 1886–90 averaged Rs. 10,137 a year, and for 1890–1900 Rs. 11,745; for 1900–1 it was Rs. 10,344, and for 1903–4 it was Rs. 8,000, the number of assessees being 202. Income tax.

Since 1901 Local funds have been administered by a District board, composed of 9 nominated, 2 elected, and 5 *ex officio* members, under the presidency of the Commissioner. Their duties include the maintenance of roads and ferries, diffusion of primary education, up-keep of dispensaries, travellers' bungalows, and cooly shelters. The revenue consists of tolls, and market and pound fees, previously credited to the old District fund, supplemented by (*a*) a new local cess of one anna in the rupee of land revenue assessment, (*b*) *mohatarfa* or profession tax payable by non-agriculturists, and (*c*) primary school fees. Local and municipal.

INCOME AND EXPENDITURE OF DISTRICT FUND

	Average for ten years 1891–1900.	1900–1.	1903–4.
	Rs.	Rs.	Rs.
Income from			
Local rate	...	...	30,861
Tolls on roads and bridges	22,532	20,062	21,312*
Miscellaneous	3,958	4,120	3,222
Pounds	3,610	3,381	2,796
Ferries	1,864	2,126	...
Mohatarfa	...	...	5,172
School fees	...	...	3,295
Total income	31,964	29,689	66,658
Expenditure on			
Refunds	67	5	...
General administration	6,806	9,883	6,557
Medical	1,282	...	4,219
Public works	24,806	18,221	32,824
Education	...	...	16,386
Post	...	...	7,194
Total expenditure	32,961	28,109	67,180

* Includes ferries.

The number of municipalities in Coorg is 5, with 57 members, of whom 18 are *ex officio*, 32 nominated, and 7 elected. The last are all in Mercāra, which is much the largest, and has a population of 6,732. All the members are natives except 5: namely, 3 in Mercāra and 2 in Vīrarājendrapet (population, 4,283). The minor municipalities are Fraserpet, Somvārpet, and Kodlipet, which are little more than villages; and it is proposed to make them 'notified areas,' in accordance with the Central Provinces Municipal Act of 1903.

INCOME AND EXPENDITURE OF MUNICIPALITIES

	Average for ten years 1891-1900.	1900-1.	1903-4.
	Rs.	Rs.	Rs.
Income from			
Tax on houses and lands	Details not available	6,007	9,040
Other taxes		19,326	8,868
Rents		...	4,587
Loans		2,500	5,873 ‡
Total income	32,789 *	27,833	28,368
Expenditure on			
Administration and collection of taxes	Details not available	1,425	2,493
Public safety		1,452	692
Water-supply and drainage:—			
(*a*) Capital		3,649	600
(*b*) Maintenance		437	361
Conservancy		7,356	9,423
Hospitals and dispensaries		9,015	9,021
Public works		3,265	1,715
Education		2,393	2,788
Other heads		1,891	5,561
Total expenditure	33,644 †	30,883	32,654

* Includes private donations and contributions, Rs. 9,185; Government loan, Rs. 5,000.
† Includes Rs. 48,105 expended on water-supply between 1892 and 1896.
‡ Grants.

Public works

At the head of the Public Works department is the Executive Engineer, under the orders of the Commissioner. The chief branch is the maintenance of communications, which is attended with special difficulty on the Ghāts. Other works include public buildings, irrigation projects, and repair of tanks.

The principal water-supply scheme has been for Mercāra, carried out between 1892 and 1896.

A Coorg class regiment was formed as an experiment in 1902, by conversion of the 11th Madras Infantry, with head-quarters at Mercāra, but proving unsuccessful has been disbanded. The Volunteer force is represented by the Coorg and Mysore Rifles, with head-quarters at Mercāra. Its strength in 1904 was 245. Camps of instruction are held periodically. Army.

The police are in charge of a European Assistant Superintendent from Madras. The force in 1904 was composed of 4 inspectors, 28 head constables, and 191 constables, of whom 40 are provided with fire-arms. Of the officers, 16 are Coorgs and 3 are Gaudas; of the constables, 71 are Coorgs, 10 are Heggades, and 31 are Gaudas. Police and jails.

STATISTICS OF COGNIZABLE CRIME

	Average of five years ending 1901.
Cases reported	870
,, decided in the criminal courts	477
,, ending in acquittal or discharge	101
,, ,, conviction	211

The Jail department is under the Civil Surgeon of Mercāra, who is also Superintendent of the jail. The jail at Mercāra practically contains all the convicts in the Province, the *tāluk* lock-ups being used only for persons under trial and prisoners sentenced for a few days. There is accommodation in the jail for 151 prisoners, and the average daily number in 1904 was 68. In the *tāluk* lock-ups there was a daily average of 3. Taking into account the receipts from jail manufactures, the cost per prisoner in jail was Rs. 37·18. Their most profitable labour is in the printing press[1], and road-making, on which the extra-mural gangs are chiefly employed.

On the annexation of the country in 1834, Anglo-vernacular schools were established by Government at Mercāra and Vīrarājendrapet, with a Kanarese school at Haṭgatnād. A school at Fraserpet was endowed by Colonel Fraser. In 1842 the Vīrarājendrapet school was superseded by one opened by the Roman Catholics, to which community all the pupils Education.

[1] The printing press has since been transferred to the control of the Commissioner.

belonged. In 1843 the educational grant was redistributed, and 21 Kanarese schools were opened in the different *nāds*, the masters being paid Rs. $2\frac{1}{2}$ a month. In 1854 the Rev. Dr. Moegling of the Basel Mission offered to superintend the schools and open superior ones if supplied with funds by Government. He was allowed in 1855 to take charge of the Mercāra English school, but only one Coorg youth could be induced to attend. In 1857 the Mysore Educational department was established, and Coorg was placed under its supervision. By 1862, the Coorgs had withdrawn their opposition to the school, and came forward with a petition to Government, offering to build and endow a boarding-house for 100 boys, as well as one for girls, in connexion with the central school at Mercāra. Government helped the scheme liberally, and the building of the new school premises and boarding-houses was brought to completion in 1870. The endowment consisted of a coffee plantation of 301 acres in Yedenālknād, the land for which was a free gift from Government. But some of the enthusiasm which prompted the petition seems by this time to have subsided, and the Coorgs objected to allow their children to be educated away from their homes. An Anglo-vernacular school was therefore established in each *tāluk* to act as a feeder for the central school. Vīrarājendrapet, Hudikeri, Fraserpet, and Napoklu were thus occupied in 1870 and 1871. The Kanarese schools, the masters for which had meanwhile been undergoing training, had increased to 27, and were popular. In 1872 the Government of India decided that primary education should be supported by local taxation, which, at the express wish of the Coorgs, was provided from a plough tax. This was found insufficient and was supplemented by a grant from Government equal to half the amount. Eventually some of the schools were made municipal schools and the remainder were supported by Imperial revenues, fees being levied in all from 1886. The head master of the Mercāra central school had been inspecting vernacular schools, and in 1883 also became Inspector of the Western Circle of the Madras Presidency. In 1888 he was relieved entirely of the school work, to the charge of which a graduate from Cambridge was appointed, the Inspector paying periodical visits to Coorg. Since 1899 the Inspectress of Girls' Schools in the Western Circle has also visited Coorg, and the control of education vested in the Local Government has been exercised through the Director of Public Instruction in Madras. In 1901 primary education was placed under the newly constituted District board, and in 1905 the supervision

of all the schools in Coorg was transferred to the Madras[1] Inspector of European and Training schools.

In 1903-4 there were 88 public and 33 private institutions, attended in all by 4,599 pupils (3,632 male, 967 female). Male scholars were 15·7 per cent. of the male population of school-going age, and female scholars 4·5 per cent. of the female population of that age. In the census returns of 1901, 78 in every 1,000 were entered as literate, that is, could read and write. The proportion for males was 128, and for females 16. Taking the Coorgs alone, 162 in 1,000 were literate, the ratio for males being 284, and for females 37, almost the whole being literate in Kanarese.

All except 3 of the schools are primary. These number 85, of which 6 are municipal, 75 are under the District board, and 4 are aided. Three of the former and one of the latter are schools for girls. Model primary schools are being established at the head-quarters of the Pādinālknād, Kiggatnād, and Nanjarājpatna *tāluks*; and three girls' schools are to be opened at Kunda, Ammatti, and Nalkeri. A pleasing feature of the Coorg *nād* schools is that they are freely attended by girls as well as boys, both learning side by side in the same classes. But no girls go alone; they accompany their brothers or other near relatives, and are in the proportion of about one girl to four boys. Instruction in the vernacular is compulsory, but in six schools some learn English also, for which they pay an extra fee. The primary school course occupies five years. The only special school is a training school at Mercāra for masters of primary schools, to which are attached stipends for thirteen[2] students. Six for girls have also now been provided, with the view of training schoolmistresses.

For secondary education there are two schools. That at Vīrājpet is of the lower secondary stage, while the other, at Mercāra, is a high school or of the upper secondary stage. In these the instruction is in English, and in 1904 they had 501 pupils, of whom 7 were girls. The number in the upper secondary stage was 98. The standard aimed at is that of the matriculation examination of the Madras University, for which Mercāra is a local centre. In the last twenty years 115 have matriculated, including 32 in the last five years. For students who wish to carry on their studies farther, scholarships are

[1] The supervision has since been transferred to the Inspector of Schools of the VIth Circle with head-quarters at Calicut, owing to the reorganization of the inspecting agency in the Madras Presidency.

[2] The number of stipends has been increased to twenty-six.

provided, tenable at the colleges in Bangalore, Mysore, or Madras. A few who have gone out of Coorg for higher education have risen to important positions in Mysore. The Mercāra high school has a well-managed boarding-house attached to it, with accommodation for sixty pupils, most of whom received stipends of 1 or 2 rupees a month from Government towards the cost of board. These were redistributed in 1905 so as to provide twenty upper secondary stipends of Rs. 3 a month, and ten lower secondary of Rs. 2 a month. The School Endowment Plantation fund pays for the servants, for a midday meal for the boarders, and contributes towards the school library.

There are no separate schools for Europeans and Eurasians, but a few Eurasian children attend the ordinary schools. For Muhammadans two schools are maintained from municipal funds, and ten free scholarships are provided for those desiring to learn English at Vīrarājendrapet or Mercāra. There is also a private school at Ammatti. The number of Muhammadan pupils was 188 in 1905. For Pariahs seven schools have been opened, which are attended by 128 pupils.

The aided schools are four for boys and one for girls, established by the Roman Catholics and the Basel Mission. They are all primary schools, and contain 304 boys and 63 girls. The private unaided schools are 25 in number, with a reported attendance of 517 pupils, of whom 70 are girls. They are very elementary.

The total number of pupils under instruction in 1880–1 was 2,792; in 1890–1 it was 4,795 (4,059 male, 736 female); in 1900–1 it was 4,723 (3,818 male, 905 female), the temporary decline being due to the high price of food and stricter levy of fees. In 1904–5 the total was 4,485, of whom 1,020 were girls.

The following table shows the expenditure on education in 1903–4:—

	Provincial funds.	District and municipal funds.	Fees.	Other sources.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.
Training and special schools	1,691	...	...	...	1,691
Secondary boys' schools	6,343	...	6,567	60	12,970
Primary boys' schools	1,440	12,516	3,698	970	18,624
Girls' schools	...	1,478	84	218	1,780
Total	9,474	13,994	10,349	1,248	35,065

Hospitals and dispensaries.

There are two civil hospitals in Coorg, at Mercāra and Vīrarājendrapet; and six dispensaries, at Napoklu, Gonikoppal, Somvārpet, Suntikoppa, Siddapur, and Pollibetta. These dispensaries are Local fund institutions, except the last, which is a private one. The number of patients treated in 1904 was 44,400. The chief causes of death among patients are fevers, diseases of the lungs, and other general diseases. Quinine in 5-grain packets (now increased to 7 grains) was sold through the agency of post offices to the number of 48,756 in 1903-4.

Vaccination.

There are eight vaccinators, two employed in Mercāra and Vīrarājendrapet under the municipalities, and the others in rural areas. Vaccination is also performed by the ordinary medical staff of the Mercāra jail and the dispensaries. The annual average number of successful vaccinations for fifteen years ending 1901 was 8,496, and the average annual ratio of deaths from small-pox for the same period one per 1,000 of the population.

MEDICAL STATISTICS

	1881.	1891.	1901.	1904.
Hospitals, &c.				
Number of civil hospitals and dispensaries	2	4	8	7
Average daily number of—				
(*a*) In-patients	28	23	48	30
(*b*) Out-patients	162	131	197	191
Income from—				
(*a*) Government payments . Rs.	3,213	1,543	3,336	6,163
(*b*) Local and municipal payments Rs.	268	7,817	10,231	6,895
(*c*) Fees, endowments, and other sources . Rs.	3,647	2,004	1,764	1,195
Expenditure—				
(*a*) Establishments . Rs.	2,207	4,331	8,178	8,085
(*b*) Medicine, diet, buildings, &c. Rs.	5,240	7,033	7,153	6,168
Vaccination.				
Population among whom carried on	4,887	8,237	12,049	180,607
Number of successful operations	4,404	7,699	10,863	9,689
Ratio per 1,000 of population	24·70	40·18	60·02	52·01
Total expenditure on vaccination Rs.	1,174	2,538	2,836	2,769
Cost per successful case . Rs.	0-4-3	0-4-6	0-4-4	0-4-8

Surveys.

The first survey was made for merely geographical purposes by Lieutenant Conner in 1817. A topographical survey of the Province, and also a survey of all coffee estates held under the Waste Land Rules, was made between 1862 and 1874 by the Madras Revenue Survey. In 1885 it was proposed to make a complete survey and settlement on the Bombay system, to be carried out by the Mysore Revenue Survey. Work began

at the end of 1887 and continued till May, 1888, in which time 82 villages with an area of 23,549 acres had been measured. But on financial grounds further operations were stopped, and in 1890 another scheme, similar to one which had been successful in the United Provinces, was adopted. The survey was concluded in October, 1892; but the demarcation of details, such as subdivisions of holdings and the preparation of complete records, was carried on by the Land Record department, and brought to an end only in 1902. The system of training *shānbhogs* or village accountants for field work has proved successful.

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MINOR ARTICLES.

Ghāts, Western.—See page 100 in Mysore portion of this volume.

Brahmagiri Range[1].—A range of mountains in Southern India, forming the south boundary of Coorg and separating it from the Wynaad. They are also known as the Marenād range. Brahmagiri or Davasibetta, the highest point, is 4,500 feet above the sea, and the source of the Lakshmantīrtha river.

Cauvery.—See page 110 in Mysore portion of this volume.

Hemāvati.—See page 114 in Mysore portion of this volume.

Lakshmantīrtha.—See page 115 in Mysore portion of this volume.

Kumāradhāri.—River in the north-west of Coorg, Southern India. It rises near the Subrahmanya hill, and after running west along the boundary at the Bisale pass, unites with the Netrāvati in South Kanara, and under that name continues to the sea at Mangalore. Garnets are found in it near Subrahmanya village.

Nujikal.—River in the west of Coorg, Southern India, which drains the Sampaji valley. At Sulya it receives a

[1] Brahmagiri is also the name of the peak in the Western Ghāts from which the Cauvery river takes its rise.

tributary from the Todikana pass and Tale-Kāveri, and under the name of the Basavani falls into the sea near Kāsaragod.

Barapole.—River in the south-west of Coorg, Southern India, with various local names in different parts. It rises in the Brahmagiri Range in the south, and flows west through a deep mountain gorge. It forms a fine waterfall near the frontier of Coorg, along which it runs for some distance till joined by the Kalluhole descending from the north through the Heggala pass. The united stream enters Malabar, where it is called the Iritti and subsequently the VALARPATTANAM, and runs into the sea near Chirakkal.

Mercāra Tāluk.—Central *tāluk* of Coorg, Southern India, lying between 11° 56′ and 12° 36′ N. and 75° 36′ and 75° 57′ E., with an area of 216 square miles. The population in 1901 was 28,620, compared with 34,088 in 1891, the decline being due to the falling off in the coffee industry and consequent depression in trade. The *tāluk* contains one town, MERCĀRA (population, 6,732), the head-quarters; and 56 villages. The Mercāra table-land, whose elevation is 3,809 feet above the sea at the fort, occupies the west centre. From it the Ghāt ranges extend westwards towards Bengunād and the Sampaji valley, northwards lies a range which includes Kotebetta (5,375 feet), on the east a range runs towards Fraserpet, and south-east a range which culminates in Nūrokkalbetta. The Cauvery runs along the southern boundary, receiving from this *tāluk* the Muttarmudi and the Chikkahole. The north is drained by the Hatti or Hārangi, which for some distance forms the boundary. Within the *tāluk* are thus comprised all the essential features of the Province. The north and west are occupied by valuable and extensive coffee plantations, and the soil generally is fertile and productive for both 'wet' and 'dry' crops.

Nanjarājpatna.—Northern *tāluk* of Coorg, Southern India, lying between 12° 21′ and 12° 51′ N. and 75° 41′ and 76° 5′ E., with an area of 355 square miles. The population fell to 42,720 in 1901, from 43,395 in 1891. The *tāluk* contains three towns—SOMVĀRPET (population, 1,745), the head-quarters, Fraserpet (1,600), and Kodlipet (889)—and 280 villages. It is very hilly in the west, having steep declivities from Pushpagiri, and a high ridge runs north and south through Yelusāvirashīme. The Cauvery forms a great part of the eastern boundary, and receives most of the waters of the *tāluk* by means of the Hatti or Hārangi, which flows into it near Rāmaswāmi Kanave. The extreme northern boundary towards the east is formed by the Hemāvati, and farther south, towards the west, by the

Kumāradhāri. This part of the country lies outside Coorg proper, and there are no Coorgs in the north except a few officials. The north-west is occupied by Yedavanād Coorgs, who wear the Coorg dress and are *jama* ryots, but are by origin Wokkaligas of Kanara and Manjarābād, and not so wealthy as the Coorgs. The rice-fields in Yedavanād which have a good water-supply yield two crops in the year. The wild sago-palm is carefully tended for the sake of the toddy drawn from it, and for the farinaceous substance obtained from the inside, which is prepared for food by the poorer classes. The inhabitants of the Kanave *hoblis* to the east are identical with the neighbouring Mysore ryots, and cultivate dry grains, such as *rāgi*, horse-gram, beans, &c. The sandal-tree grows abundantly in this *tāluk*.

Pādinālknād.—Western *tāluk* of Coorg, Southern India, lying between 12° 6′ and 12° 31′ N. and 75° 22′ and 75° 48′ E., with an area of 400 square miles. The population was 28,620 in 1901, and 28,219 in 1891. The *tāluk* contains 57 villages. The entire west is skirted by the high range of the Western Ghāts, including the lofty peak of Tadiandamol (5,729 feet), the highest point in Coorg, with the Perūr and Srimangala peaks. The Cauvery has its source in the north-west and runs across the middle of the *tāluk* in a south-easterly direction. The north is bounded in some parts by the Nujikal river. There is little arable land, but plenty of hilly grass and forest land, with the largest and most productive cardamom jungles. Rice cultivation is so deficient that even the largest farms are not able to produce sufficient for their own consumption. The ryots in general have to buy rice for six months in the year, and their chief reliance has been on the produce of their cardamom and coffee gardens. Tavunād in the north-west contains some of the wildest tracts in Coorg. In the forests which cover the western declivities of the Ghāts are found the jungle tribe called Kādu Maratis, who live by *kumri* cultivation; and the Kadavas or Bodavas, the attire of whose women is only a few leaves, but these it is said they change four times a day. The settled population of this *nād* consists almost entirely of Tulu Gaudas. There are many sacred forests called Devara-kādu in the *tāluk*, which have for ages remained intact. But some of these rich tracts have been cautiously invaded and planted with coffee, a share of the produce being paid towards the worship of the deities despoiled, in order to avert their wrath.

Yedenālknād.—*Tāluk* stretching across Coorg, Southern

India, immediately to the south of the Cauvery river. It lies between 12° 4′ and 12° 23′ N. and 75° 43′ and 76° 12′ E., with an area of 201 square miles. The population rose to 43,412 in 1901 from 36,123 in 1891. The *tāluk* contains one town, VIRARĀJENDRAPET (population, 4,283), the head-quarters; and 52 villages. The Cauvery forms the northern boundary, and the Kallu river part of the western. The west is crossed by the Ghāt range, and on the east frontier is the Siddesvara hill, between which and the Ghats extends an irregular chain of hills in a south-western direction across the *tāluk*, separating the basin of the Cauvery from that of the Lakshmantīrtha, and containing many prominent peaks. This *tāluk* is considered the focus of Coorg life, and most of the leading families reside here. It contains the most fertile rice-fields in Coorg, and also extensive coffee plantations, European and native. On the Periambādi *ghāt* are still some fine forests, and in Beppunād is a dense Devara-kādu called Kariarbana ('blackest jungle'), sacred to Beturappa, which the natives through superstitious dread never enter. In Ammatti-nād is what is called the Bamboo district, 13 miles square, remarkable for the luxuriant growth of its coffee, which but for the devastation of the borer would have been the most productive in Coorg.

Kiggatnād.—Southern *tāluk* of Coorg, Southern India, lying between 11° 56′ and 12° 18′ N. and 75° 50′ and 76° 12′ E., with an area of 410 square miles. The population was 37,235 in 1901 and 31,230 in 1891. The *tāluk* contains 68 villages, of which Ponnampet is the head-quarters. The west rests upon the Western Ghāts, covered with evergreen forest; the south is bounded by the Brahmagiri or Marenād range, from which ridges of hills branch off throughout the *tāluk*; the east is a continuous stretch of deciduous forest, through which flows the Lakshmantīrtha.

Iggutappadevarbetta.—A lofty mountain in the Pādinālknād *tāluk* of Coorg, Southern India, situated in 12° 17′ N. and 75° 38′ E., near the Paditora pass, sacred to the god Iggutappa.

Kodangibetta ('Elk hill').—A peak in the east of the Yedenālknād *tāluk* of Coorg, Southern India, situated in 12° 16′ N. and 75° 58′ E.

Kotebetta.—A mountain in Coorg, Southern India, about 9 miles north of Mercāra, 5,375 feet high. Its base covers a large extent of country. The summit is divided into two peaks, one rather pointed, the Harangalbetta, and the other broad, forming a flat table-land.

Mālambi (or Mālimbi).—A fine conical hill in the north-east of Coorg, Southern India, situated in 12° 40′ N. and 75° 58′ E., 4,488 feet high, conspicuous in all that part of the country.

Mercāra Town (properly Madikeri, 'clean town').—The chief town of Coorg, Southern India, situated in 12° 25′ N. and 75° 44′ E., on an elevated plateau, points on which are 3,961 feet above the sea in the south, 4,155 to the west, 4,267 to the north-east, and 4,345 to the south-east. It consists of the native town of Mahādevapet and the fort, which is 3,809 feet above the sea. Population (1901), 6,732 (4,496 Hindus, 1,635 Muhammadans, 559 Christians, and 42 others). For the reasons given in the article on the *tāluk*, the numbers have fallen from 8,383 in 1891. An efficient water-supply has been provided, chiefly from private contributions. In 1903–4 the municipal income was Rs. 18,000, including taxes on houses and lands (Rs. 6,200), professions and trades (Rs. 2,300), and grants and loans (Rs. 4,500). The expenditure amounted to Rs. 20,000, the chief items being hospitals and dispensaries (Rs. 5,300), conservancy (Rs. 3,000), and education (Rs. 1,700).

Mercāra was selected by Muddu Rājā on account of its central and inaccessible position as the site of his fort and capital, and thither in 1681 he moved the royal residence from Hāleri, a few miles to the north. The present fort, which is of stone, was built by Tipū Sultān, and named by him Jāfarābād. On the approach of the British force marching against Seringapatam under Abercromby in 1790, the fort was evacuated by Tipū's troops and delivered over with all its guns and ammunition to the Rājā of Coorg. It surrendered to the British without opposition in 1834, and is still in pretty good preservation, but of little strategical value, being commanded by hills all round within short range of cannon. It consists of a rampart 8 feet thick, and from 15 to 20 feet high outside, with battlements 2 feet thick and 5 feet high. The fortress is an irregular hexagon, and nearly conforms to the shape of the hill-top, leaving enough space for a ditch all round, and on the north side for a glacis. There are bastions at the six angles, and the whole is built of strong masonry. The circuitous entrance is on the east, and guarded by three successive gates. In the fort is the palace, erected of brick in 1812 by Linga Rājā. The ground plan is that of a Coorg house, with a superstructure in European fashion. It forms a large square of 200 feet, with an open space in the centre, and is two storeys high. In the fort are the Commissioner's residence and the public offices. In the inner fort, to the southern front of the palace,

is the English church, built on the site of a Vīrabhadra temple removed in 1855. In the opposite corner of the courtyard is (or was) the figure of an elephant, in masonry, life size. It is said that the Rājā used to stand at the balcony of the palace with a rifle and cause prisoners to run across the yard while he fired at them, with the promise of their lives if they escaped to the elephant, which however seldom occurred.

The native town or Mahādevapet, so named after Vīra Rājendra's second Rānī, runs along a ridge which stretches northwards from the fort, being separated from it by a narrow rice valley. It consists of three streets, two of which are nearly parallel. At the farther end of the town, on a rising ground, are the picturesque tombs of the Coorg Rājās. A market is held in the *petta* every Friday. In a hollow to the east of the fort is the Omkāresvara temple, around which are the residences of the principal native officials. But the Coorgs in Mercāra seldom have their families with them; these remain on the farms. More to the north are the central school-buildings, erected on the site of the ruins of the palace built by Linga Rājā for the reception of European visitors. To the south of the fort are the parade ground and promenade, at the farther end of which is the Rājā's Seat, a public garden from which a fine panorama is obtained of Coorg scenery.

Somamale.—A lofty mountain in the Pādinālknād *tāluk* of Coorg, Southern India, situated in 12° 11′ N. and 75° 45′ E., the highest in Kādyetnād. It is sacred to Male Tambiran, and overlooks the Kodantora pass. It is about 6 miles south-east of Tadiandamol.

Somvārpet (also called Nagarūr).—Head-quarters of the Nanjarājpatna *tāluk* of Coorg, Southern India, situated in 12° 36′ N. and 75° 52′ E., 26 miles north of Mercāra. Population (1901), 1,745. The name means 'Monday market,' a fair being held on that day. The water-supply and dispensary were provided from private contributions. The municipal income in 1903–4 was Rs. 1,300 and the expenditure Rs. 2,100.

Subrahmanya (or Pushpagiri).—Village in the Uppinangadi *tāluk* of South Kanara District, Madras, situated in 12° 41′ N. and 75° 36′ E., at the foot of a celebrated mountain, the correct name of which is Pushpagiri, on the border of that District and Coorg. The mountain, which is two-pointed, precipitous, and of peculiar shape, is one of the most prominent heights in these parts, resembling, as seen from Mercāra, a gigantic bullock hump. Elevation, 5,626 feet above the sea. On its summit

are many ancient stone cairns. In the village is an old and famous Saivite temple, and it is one of the chief centres of serpent-worship in Southern India. To the cattle fair held at the time of the annual festival in November–December it has been estimated that 50,000 cattle are usually brought, mainly from Mysore.

Tadiandamol.—The highest mountain in Coorg, Southern India (5,729 feet), situated in 12° 13′ N. and 75° 40′ E., in the south-west of the Pādinālknād *tāluk*.

Tumbemale.—Peak in the Pādinālknād *tāluk* of Coorg, Southern India, in the Western Ghāts.

Vīrarājendrapet (generally called Vīrājpet).—Head-quarters of the Yedenālknād *tāluk* of Coorg, Southern India, situated in 12° 12′ N. and 75° 49′ E., 20 miles south of Mercāra. Population (1901), 4,283 (2,256 Hindus, 1,517 Muhammadans, 452 Christians, and 58 others). The municipal income for 1903–4 was Rs. 7,500 and the expenditure Rs. 18,000. The town was founded by Dodda Vīra Rājendra (after whom it is named) in 1792, in commemoration of the meeting which took place here between himself and General Abercromby, the British commander advancing with the Bombay force against Seringapatam. It is prettily situated at the foot of the Male Tambiran hill. The fair held every Wednesday attracts a great concourse of Coorgs. The Christian population consists of a Roman Catholic community of Konkanis, who escaped from the persecution of Tipū, and to whom the Coorg Rājā granted a settlement here. The trade with the west coast in coffee, rice, and cardamoms makes it the most important commercial town in Coorg. Next to the public offices, the most conspicuous building is the Roman Catholic church, rebuilt some time ago in the Gothic style, with a copper roof.

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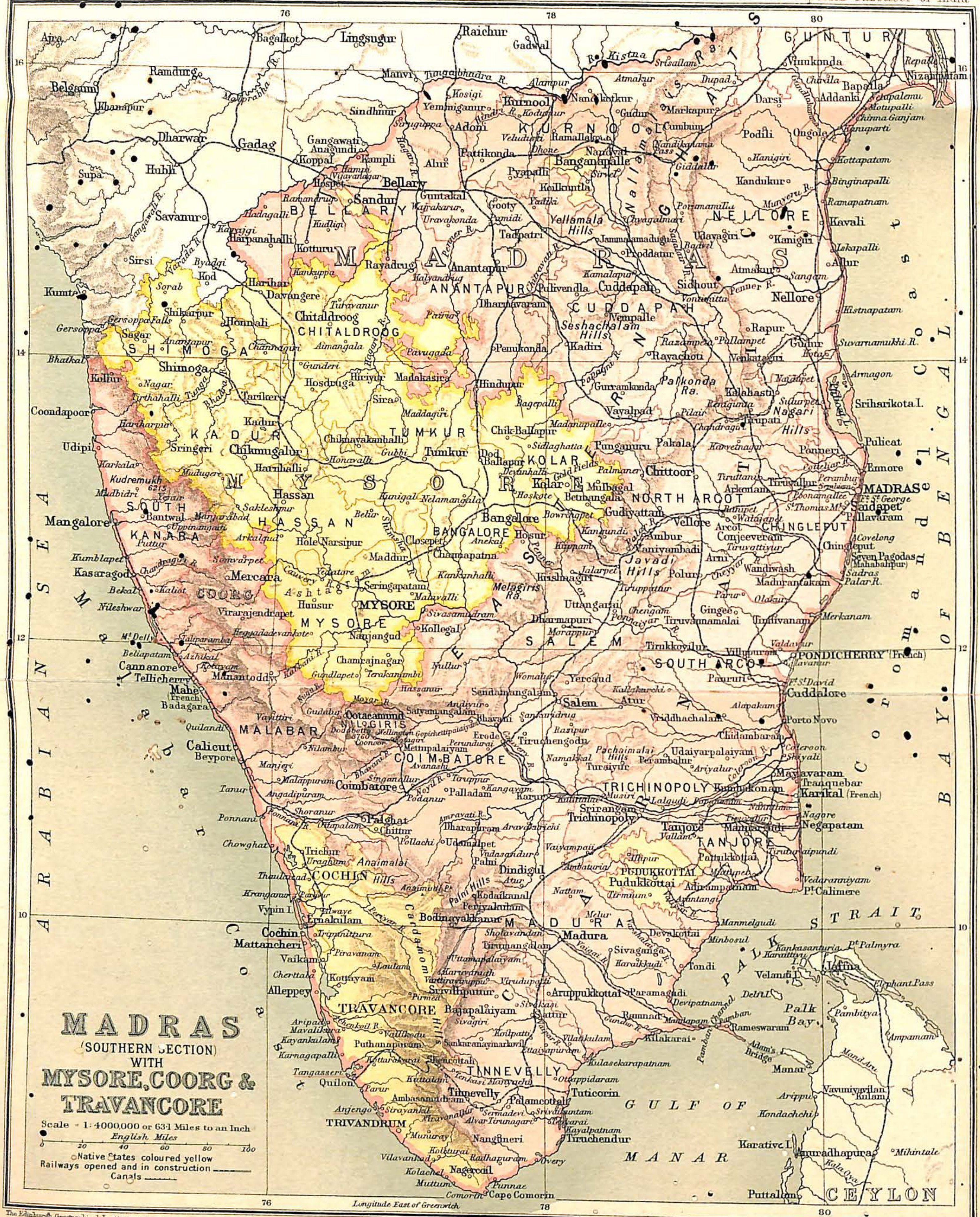
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MADRAS
(SOUTHERN SECTION)
WITH
MYSORE, COORG & TRAVANCORE
Scale = 1:4000,000 or 63·1 Miles to an Inch
English Miles
0 20 40 60 80 100
Native States coloured yellow
Railways opened and in construction
Canals
Longitude East of Greenwich
76
78
80
ARABIAN SEA
BAY OF BENGAL
GULF OF MANAR
PALK STRAIT
CEYLON
MADRAS
MYSORE
COORG
TRAVANCORE
COCHIN
MALABAR
SOUTH KANARA
BELLARY
KURNOOL
ANANTAPUR
CUDDAPAH
NELLORE
NORTH ARCOT
CHINGLEPUT
SOUTH ARCOT
SALEM
COIMBATORE
NILGIRIS
TRICHINOPOLY
TANJORE
PUDUKKOTTAI
MADURA
TINNEVELLY
SHIMOGA
KADUR
CHITALDROOG
TUMKUR
KOLAR
HASSAN
BANGALORE
PONDICHERRY (French)
Karikal (French)
Mahe (French)
Cape Comorin